



PP1C mouse mAb

Catalog No	YP-Ab-04466
Isotype	IgG
Reactivity	Human
Applications	WB
Gene Name	ppp1cc
Immunogen	Purified recombinant human PP1C protein fragments expressed in E.coli.
Specificity	This antibody detects endogenous levels of PP1C and does not cross-react with related proteins.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb 1:500
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PP1C;ppp1cc;EC 3.1.3.16;PP 1G;PP-1G;PP1G;PP1G_HUMAN;PP1gamma;PPP 1G;PPP1CC protein;PPP1G;Protein phosphatase 1 catalytic subunit gamma isoform;Protein phosphatase 1C catalytic subunit;Protein phosphatase 1C subunit;Protein phosphatase 2C gamma isoform;Serine/threonine phosphatase 1 gamma;Serine/threonine protein phosphatase PP1 gamma catalytic subunit;Serine/threonine-protein phosphatase PP1-gamma catalytic subunit.
Observed Band	38kD
Calculated Molecular Weight	38kD
Cell Pathway	Cytoplasm . Nucleus. Nucleus, nucleolus . Nucleus, nucleoplasm . Nucleus speckle . Chromosome, centromere, kinetochore . Cleavage furrow . Midbody . Mitochondrion . Cytoplasm, cytoskeleton, microtubule organizing center . Colocalizes with SPZ1 in the nucleus (By similarity). Colocalizes with URI1 at mitochondrion (PubMed:17936702). Rapidly exchanges between the nucleolar, nucleoplasmic and cytoplasmic compartments (PubMed:11739654). Highly mobile in cells and can be relocalized through interaction with targeting subunits (PubMed:17965019). In the presence of PPP1R8 relocalizes from the nucleolus to nuclear speckles (PubMed:11739654). Shows a dynamic targeting to specific sites throughout the cell cycle (PubMed:12529430). Highly concentrated in



nucleoli of interphase cells and localizes at

Tissue Specificity

Embryonic kidney,Placenta,Skeletal muscle,

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., 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 1 (PP1) is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Involved in regulation of ionic conductances and long-term synaptic plasticity. May play an important role in dephosphorylating substrates such as the postsynaptic density-associated Ca(2+)/calmodulin dependent protein kinase II., miscellaneous: Microcystin toxin is bound to Cys-273 through a thioether bond., online information: The things we forget - Issue 32 of March 2003, similarity: Belon

Background

The protein encoded by this gene belongs to the protein phosphatase family, PP1 subfamily. PP1 is an ubiquitous serine/threonine phosphatase that regulates many cellular processes, including cell division. It is expressed in mammalian cells as three closely related isoforms, alpha, beta/delta and gamma, which have distinct localization patterns. This gene encodes the gamma isozyme. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011],

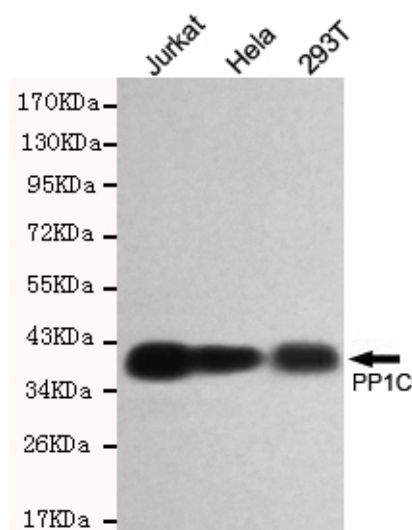
matters needing attention

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 detection of PP1C in HeLa, 293T and Jurkat cell lysates using PP1C mouse mAb (1:500 diluted). Predicted band size: 38KDa. Observed band size: 38KDa.