



PP2A-Cα Monoclonal Antibody

Catalog No	YP-Ab-14202
Isotype	IgG
Reactivity	Human;Mouse;Bovine;Chicken;Dog;Pig;Rabbit;Zebrafish
Applications	WB;IF
Gene Name	PPP2CA
Protein Name	Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform
Immunogen	Purified recombinant human PP2A-Cα (N-terminus) protein fragments expressed in E.coli.
Specificity	PP2A-Cα Monoclonal Antibody detects endogenous levels of PP2A-Cα 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. Immunofluorescence: 1/100 - 1/500. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PPP2CA; Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform; PP2A-alpha; Replication protein C; RP-C
Observed Band	
Cell Pathway	Cytoplasm . Nucleus . Chromosome, centromere . Cytoplasm, cytoskeleton, spindle pole . In prometaphase cells, but not in anaphase cells, localizes at centromeres (PubMed:16541025). During mitosis, also found at spindle poles (PubMed:16541025). Centromeric localization requires the presence of SGO2 (By similarity). .
Tissue Specificity	Fibroblast,Liver,Lung,Placenta,Testis,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.,function: PP2A can modulate the activity of phosphorylase B kinase casein kinase 2, mitogen-stimulated S6 kinase, and MAP-2 kinase. Can dephosphorylate SV40 large T antigen and p53. Dephosphorylates SV40 large T antigen, preferentially on serine residues 120, 123, 677, and perhaps 679. The C subunit was most active, followed by the AC form, which was more active than the ABC form, and activity of all three forms was strongly stimulated by manganese, and to a lesser extent by magnesium. Dephosphorylation by the AC form, but not C or ABC form is inhibited by small T antigen.,PTM: Phosphorylation of either threonine (by autophosphorylation-activated protein kinase) or tyrosine results in



inactivation of the phosphatase. Auto-dephosphorylation

Background

This gene encodes the phosphatase 2A catalytic subunit. Protein phosphatase 2A is one of the four major Ser/Thr phosphatases, and it is implicated in the negative control of cell growth and division. It consists of a common heteromeric core enzyme, which is composed of a catalytic subunit and a constant regulatory subunit, that associates with a variety of regulatory subunits. This gene encodes an alpha isoform of the catalytic subunit. [provided by RefSeq, Jul 2008],

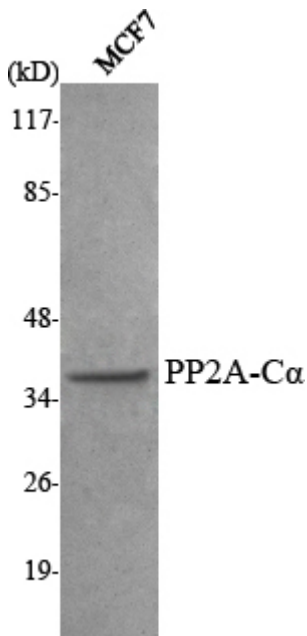
matters needing attention

Avoid repeated freezing and thawing!

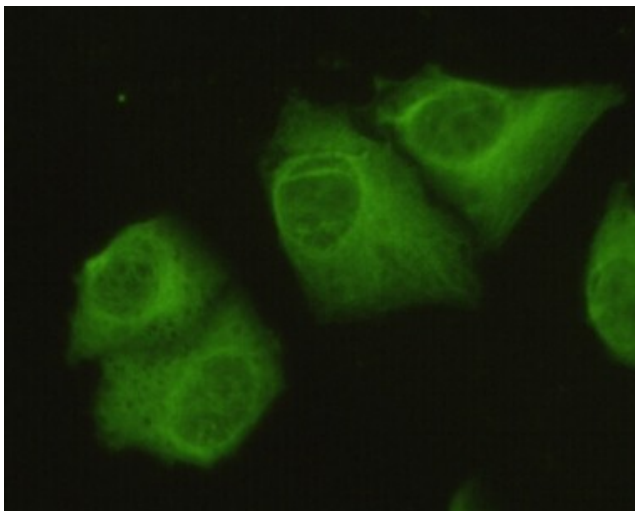
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis using PP2A-C α Monoclonal Antibody against MCF7 cell lysate.



Immunofluorescence analysis of HeLa cells using PP2A-C α Monoclonal Antibody.