

## PP2A-Ca Monoclonal Antibody

Catalog No :	YM1079
Reactivity :	Human;Mouse;Bovine;Chicken;Dog;Pig;Rabbit;Zebrafish
Applications :	WB;IF
Target :	PP2AA
Fields :	>>mRNA surveillance pathway;>>Sphingolipid signaling pathway;>>Oocyte meiosis;>>Autophagy - other;>>Autophagy - animal;>>PI3K-Akt signaling pathway;>>AMPK signaling pathway;>>Adrenergic signaling in cardiomyocytes;>>TGF-beta signaling pathway;>>Hippo signaling pathway;>>Tight junction;>>Dopaminergic synapse;>>Long-term depression;>>Chagas disease;>>Hepatitis C;>>Human papillomavirus infection
Gene Name :	PPP2CA
Protein Name :	Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform
Human Gene Id :	5515
Human Swiss Prot	P67775
No : Mouse Gene Id :	19052
Mouse Swiss Prot	P63330
No : Rat Swiss Prot No :	P63331
Immunogen :	Purified recombinant human PP2A-Cα (N-terminus) protein fragments expressed in E.coli.
Specificity :	PP2A-Ca Monoclonal Antibody detects endogenous levels of PP2A-Ca protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse



Dilution :	WB 1:1000 - 1:2000. IF 1:100 - 1:500. 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 :	36kD
Cell Pathway :	Oocyte meiosis;WNT;WNT-T CELLTGF-beta;Tight junction;Long-term depression;
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],
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
Subcellular Location :	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)
Expression :	Fibroblast,Liver,Lung,Placenta,Testis,Uterus,
Sort :	12928
No4 :	1
Host :	Mouse



**Modifications :** 

Unmodified

## **Products Images**



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



Immunofluorescence analysis of HeLa cells using PP2A-C  $\alpha$  Monoclonal Antibody.