



# PP2A-C $\alpha$ Monoclonal Antibody

Catalog No	BYmab-14951
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PPP2CA
Protein Name	Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform
Immunogen	The antiserum was produced against synthesized peptide derived from human PP2A-alpha. AA range:260-309
Specificity	PP2A-C $\alpha$ Monoclonal Antibody detects endogenous levels of PP2A-C $\alpha$ protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	$\geq 90\%$
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	35kD
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

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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],

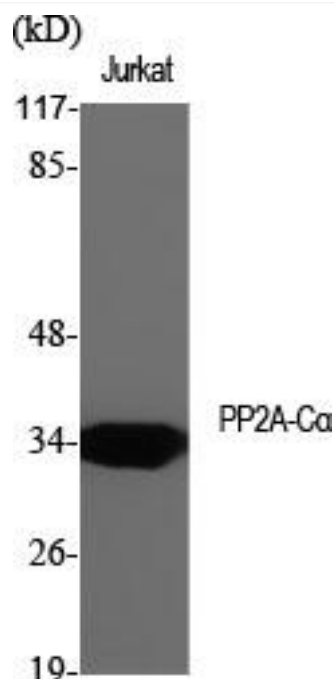
#### matters needing attention

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 of various cells using PP2A-C  $\alpha$  Monoclonal Antibody