



# PP2A-Cα (phospho Tyr307) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14515
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IP;IHC;IF;ELISA
<b>Gene Name</b>	PPP2CA
<b>Protein Name</b>	Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PP2A-alpha around the phosphorylation site of Tyr307. AA range:260-309
<b>Specificity</b>	Phospho-PP2A-Cα (Y307) Polyclonal Antibody detects endogenous levels of PP2A-Cα protein only when phosphorylated at Y307.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	PPP2CA; Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform; PP2A-alpha; Replication protein C; RP-C
<b>Observed Band</b>	35kD
<b>Cell Pathway</b>	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). .
<b>Tissue Specificity</b>	Fibroblast,Liver,Lung,Placenta,Testis,Uterus,
<b>Function</b>	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],

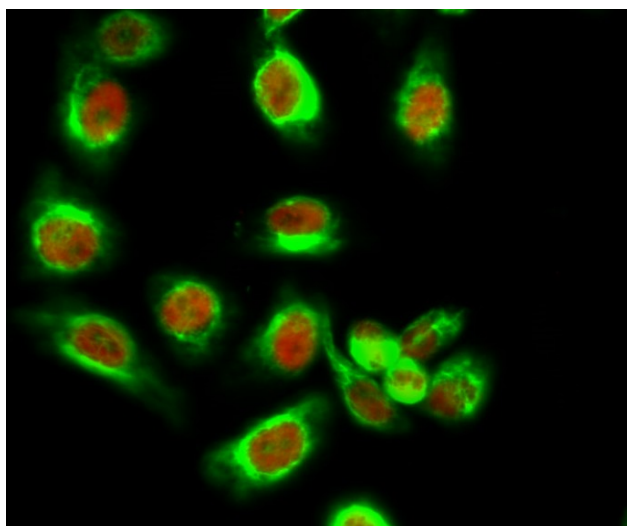
### matters needing attention

Avoid repeated freezing and thawing!

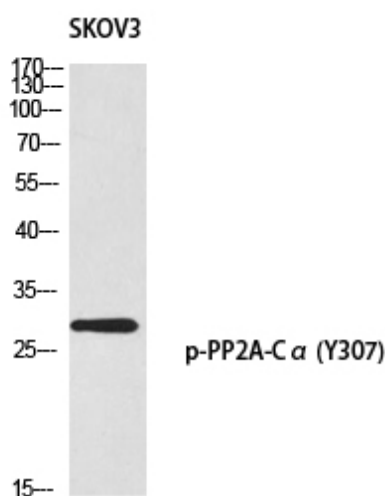
### Usage suggestions

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

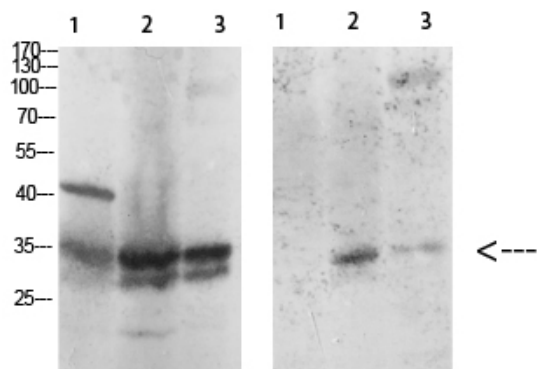
## Products Images



Immunofluorescence analysis of HeLa cell. 1, PP2A-C $\alpha$  (phospho Tyr307) Polyclonal Antibody (red) was diluted at 1:200 (4 $^{\circ}$  overnight). HSP70 Monoclonal Antibody (3G10) (green) was diluted at 1:200 (4 $^{\circ}$  overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).

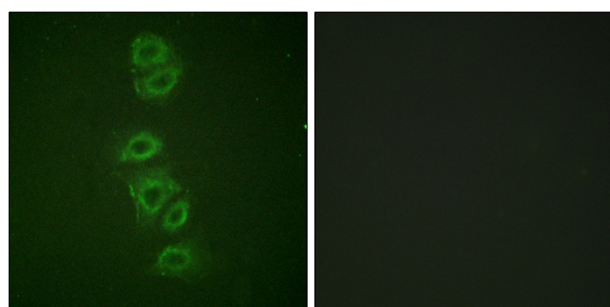


Western blot analysis of SKOV3 using p-PP2A-C $\alpha$  (Y307) antibody. Antibody was diluted at 1:1000

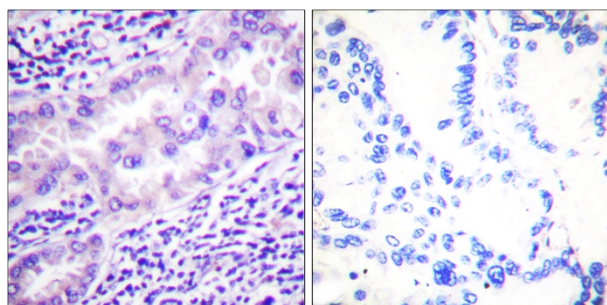


15-- PP2A-C $\alpha$  PP2A-C $\alpha$ p-Tyr307  
1 mouse-kidney  
2 HeLa-UV  
3 HeLa

Western Blot analysis of various cells using Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunofluorescence analysis of A549 cells, using PP2A-alpha (Phospho-Tyr307) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using PP2A-alpha (Phospho-Tyr307) Antibody. The picture on the right is blocked with the phospho peptide.