

**Anti-Phospho-PP2A alpha (Y307) PPP2CA Rabbit Monoclonal Antibody**  
Catalog # ABO13191**Specification****Anti-Phospho-PP2A alpha (Y307) PPP2CA Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, IP
Primary Accession	<a href="#">P67775</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Phospho-PP2A alpha (Y307) PPP2CA Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

**Anti-Phospho-PP2A alpha (Y307) PPP2CA Rabbit Monoclonal Antibody - Additional Information**

Gene ID 5515

**Other Names**

Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform, PP2A-alpha, 3.1.3.16, Replication protein C, RP-C, PPP2CA

**Calculated MW**

35594 MW KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:50

**Subcellular Localization**

Cytoplasm. Nucleus. Chromosome, centromere. Cytoplasm, cytoskeleton, spindle pole. In prometaphase cells, but not in anaphase cells, localizes at centromeres. During mitosis, also found at spindle poles. Centromeric localization requires the presence of SGOL2 (By similarity)..

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Phospho-PP2A alpha (Y307)

**Purification**

Affinity-chromatography

**Storage**

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for

up to one month. Avoid repeated  
freeze-thaw cycles.

## Anti-Phospho-PP2A alpha (Y307) PPP2CA Rabbit Monoclonal Antibody - Protein Information

**Name** PPP2CA

### Function

Catalytic subunit of protein phosphatase 2A (PP2A), a serine/threonine phosphatase involved in the regulation of a wide variety of enzymes, signal transduction pathways, and cellular events. PP2A is the major phosphatase for microtubule-associated proteins (MAPs) (PubMed:<a href="http://www.uniprot.org/citations/22613722" target="\_blank">22613722</a>). PP2A can modulate the activity of phosphorylase B kinase casein kinase 2, mitogen-stimulated S6 kinase, and MAP-2 kinase (PubMed:<a href="http://www.uniprot.org/citations/22613722" target="\_blank">22613722</a>). Cooperates with SGO2 to protect centromeric cohesin from separase-mediated cleavage in oocytes specifically during meiosis I (By similarity). Can dephosphorylate SV40 large T antigen and p53/TP53 (PubMed:<a href="http://www.uniprot.org/citations/17245430" target="\_blank">17245430</a>). Activates RAF1 by dephosphorylating it at 'Ser-259' (PubMed:<a href="http://www.uniprot.org/citations/10801873" target="\_blank">10801873</a>). Mediates dephosphorylation of WEE1, preventing its ubiquitin-mediated proteolysis, increasing WEE1 protein levels, and promoting the G2/M checkpoint (PubMed:<a href="http://www.uniprot.org/citations/33108758" target="\_blank">33108758</a>). Mediates dephosphorylation of MYC; promoting its ubiquitin-mediated proteolysis: interaction with AMBRA1 enhances interaction between PPP2CA and MYC (PubMed:<a href="http://www.uniprot.org/citations/25438055" target="\_blank">25438055</a>). Mediates dephosphorylation of FOXO3; promoting its stabilization: interaction with AMBRA1 enhances interaction between PPP2CA and FOXO3 (PubMed:<a href="http://www.uniprot.org/citations/30513302" target="\_blank">30513302</a>). Catalyzes dephosphorylation of the pyrin domain of NLRP3, promoting assembly of the NLRP3 inflammasome (By similarity). Part of the striatin-interacting phosphatase and kinase (STRIPAK) complexes. STRIPAK complexes have critical roles in protein (de)phosphorylation and are regulators of multiple signaling pathways including Hippo, MAPK, nuclear receptor and cytoskeleton remodeling. Different types of STRIPAK complexes are involved in a variety of biological processes such as cell growth, differentiation, apoptosis, metabolism and immune regulation (PubMed:<a href="http://www.uniprot.org/citations/33633399" target="\_blank">33633399</a>).

### Cellular Location

Cytoplasm. Nucleus. Chromosome, centromere. Cytoplasm, cytoskeleton, spindle pole. Note=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) {ECO:0000250|UniProtKB:P63330, ECO:0000269|PubMed:16541025}

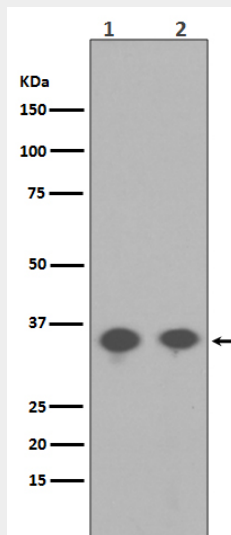
## Anti-Phospho-PP2A alpha (Y307) PPP2CA Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Phospho-PP2A alpha (Y307) PPP2CA Rabbit Monoclonal Antibody - Images



Western blot analysis of Phospho-PP2A alpha (Y307) in (1) Rat kidney lysate; (2) A431 cell lysate treated with EGF.