

PP2Ac / PPP2CA Antibody (clone P6C7)
Mouse Monoclonal Antibody
Catalog # ALS12538**Specification**

PP2Ac / PPP2CA Antibody (clone P6C7) - Product Information

Application	WB
Primary Accession	P67775
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	36kDa KDa

PP2Ac / PPP2CA Antibody (clone P6C7) - 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

Reconstitution & Storage

Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

Precautions

PP2Ac / PPP2CA Antibody (clone P6C7) is for research use only and not for use in diagnostic or therapeutic procedures.

PP2Ac / PPP2CA Antibody (clone P6C7) - Protein Information**Name** PPP2CA**Function**

PP2A is the major phosphatase for microtubule-associated proteins (MAPs) (PubMed:22613722). PP2A can modulate the activity of phosphorylase B kinase casein kinase 2, mitogen-stimulated S6 kinase, and MAP-2 kinase (PubMed:22613722). 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:17245430). Activates RAF1 by dephosphorylating it at 'Ser-259' (PubMed:10801873). Mediates dephosphorylation of WEE1, preventing its ubiquitin-mediated proteolysis, increasing WEE1 protein levels, and promoting the G2/M checkpoint (PubMed:33108758). Mediates dephosphorylation of MYC; promoting its ubiquitin-mediated proteolysis: interaction with AMBRA1 enhances interaction between PPP2CA and MYC (PubMed:33108758).

href="http://www.uniprot.org/citations/25438055" target="_blank">25438055). Mediates dephosphorylation of FOXO3; promoting its stabilization: interaction with AMBRA1 enhances interaction between PPP2CA and FOXO3 (PubMed:30513302). Catalyzes dephosphorylation of the pyrin domain of NLRP3, promoting assembly of the NLRP3 inflammasome (By similarity).

Cellular Location

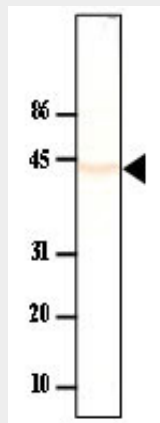
Cytoplasm. Nucleus. Chromosome, centromere. Cytoplasm, cytoskeleton, spindle pole. Note=In prometaphase cells, but not in anaphase cells, localizes at centromeres (PubMed:16541025). During mitosis, also found at spindle poles (PubMed:16541025). Centromeric localization requires the presence of SGO2 (By similarity) {ECO:0000250|UniProtKB:P63330, ECO:0000269|PubMed:16541025}

PP2Ac / PPP2CA Antibody (clone P6C7) - 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](#)

PP2Ac / PPP2CA Antibody (clone P6C7) - Images



Mouse liver cytosol extract was resolved by electrophoresis, transferred to PVDF membrane and...

PP2Ac / PPP2CA Antibody (clone P6C7) - Background

PP2A is the major phosphatase for microtubule-associated proteins (MAPs). PP2A can modulate the activity of phosphorylase B kinase casein kinase 2, mitogen-stimulated S6 kinase, and MAP-2 kinase. Cooperates with SGOL2 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. Activates RAF1 by dephosphorylating it at 'Ser-259'.

PP2Ac / PPP2CA Antibody (clone P6C7) - References

Stone S.R.,et al.Nucleic Acids Res. 16:11365-11365(1988).
Arino J.,et al.Proc. Natl. Acad. Sci. U.S.A. 85:4252-4256(1988).
Khew-Goodall Y.,et al.Biochemistry 30:89-97(1991).
Scheidtmann K.H.,et al.Mol. Cell. Biol. 11:1996-2003(1991).
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