

PP2A alpha Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP8462a**Specification****PP2A alpha Antibody (N-term) Blocking peptide - Product Information**Primary Accession [P67775](#)**PP2A alpha Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 5515**Other Names**

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8462a](/product/products/AP8462a) was selected from the N-term region of human PPP2CA/B. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PP2A alpha Antibody (N-term) Blocking peptide - Protein Information**Name** PPP2CA**PP2A alpha Antibody (N-term) Blocking peptide - Background**

PPP2CA/B represents 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.

PP2A alpha Antibody (N-term) Blocking peptide - References

Gergs, U., et al., J. Biol. Chem. 279(39):40827-40834 (2004). Prickett, T.D., et al., J. Biol. Chem. 279(37):38912-38920 (2004). Scott, G.K., et al., EMBO J. 22(23):6234-6244 (2003). Rao, R.K., et al., Biochem. Biophys. Res. Commun. 293(1):610-616 (2002). Avdi, N.J., et al., J. Biol. Chem. 277(43):40687-40696 (2002).

Function

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 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. 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).

Cellular Location

Cytoplasm. Nucleus. Chromosome, centromere. Cytoplasm, cytoskeleton, spindle pole. Note=In prometaphase cells, but not in anaphase cells, localizes at centromeres. During mitosis, also found at spindle poles. Centromeric localization requires the presence of SGO2 (By similarity).

PP2A alpha Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)