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PPP4C Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP8475a

Specification

PPP4C Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P60510

PPP4C Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 5531

Other Names
Serine/threonine-protein phosphatase 4 catalytic subunit, PP4C, Pp4, Protein phosphatase X, PP-X, PPP4C, PPP4, PPX

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8475a was selected from the N-term region of human PPP4C. 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.

PPP4C Antibody (N-term) Blocking Peptide - Protein Information

Name PPP4C

PPP4C Antibody (N-term) Blocking Peptide - Background

PPP4C belongs to the PPP phosphatase family, PP-X subfamily, and may participate in microtubule organization. Both overexpression and RNA interference experiments indicate that HDAC3 activity is inversely proportional to the cellular abundance of PPP4C. The PPP4C gene maps to chromosome 16p12-p11. Several translocations associated with acute leukemias have been mapped to this region of chromosome 16p.

PPP4C Antibody (N-term) Blocking Peptide - References

Zhou, G., et al., J. Biol. Chem. 279(47):49551-49561 (2004).Mihindukulasuriya, K.A., et al., J. Biol. Chem. 279(45):46588-46594 (2004).Yeh, P.Y., et al., J. Biol. Chem. 279(25):26143-26148 (2004).Kloeker, S., et al., J. Biol. Chem. 274(9):5339-5347 (1999).Chen, J., et al., Biochem. Biophys. Res. Commun. 247(3):827-832 (1998).

Synonyms PPP4, PPX

Function
Protein phosphatase that is involved in many processes such as microtubule organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, DNA repair, tumor necrosis factor (TNF)-alpha signaling, activation of c-Jun N-terminal kinase MAPK8, regulation of histone acetylation, DNA damage checkpoint signaling, NF-kappa-B activation and cell migration. The PPP4C-PPP4R1 PP4 complex may play a role in dephosphorylation and regulation of HDAC3. The PPP4C-PPP4R2-PPP4R3A PP4 complex specifically dephosphorylates H2AX phosphorylated on Ser-140 (gamma-H2AX) generated during DNA replication and required for DNA double strand break repair. Dephosphorylates NDEL1 at CDK1 phosphorylation sites and negatively regulates CDK1 activity in interphase (By similarity). In response to DNA damage, catalyzes RPA2 dephosphorylation, an essential step for DNA repair since it allows the efficient RPA2-mediated recruitment of RAD51 to chromatin.

Cellular Location
Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

PPP4C Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides