

**PPP4C Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13756c****Specification**

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**PPP4C Antibody (Center) Blocking peptide - Product Information**Primary Accession [P60510](#)**PPP4C Antibody (Center) 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 AP13756c was selected from the Center region of 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 (Center) Blocking peptide - Protein Information****Name** PPP4C**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 (Center) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

#### **PPP4C Antibody (Center) Blocking peptide - Images**

#### **PPP4C Antibody (Center) Blocking peptide - Background**

Protein phosphatase that is involved in many processes such as microtubule organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, 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 H2AFX phosphorylated on Ser-140 (gamma-H2AFX) generated during DNA replication and required for DNA DSB repair. Dephosphorylates NDEL1 at CDK1 phosphorylation sites and negatively regulates CDK1 activity in interphase (By similarity).

#### **PPP4C Antibody (Center) Blocking peptide - References**

Lee, D.H., et al. Nat. Struct. Mol. Biol. 17(3):365-372(2010)Mourtada-Maarabouni, M., et al. Leuk. Res. 33(11):1539-1551(2009)Kumar, R.A., et al. PLoS ONE 4 (2), E4582 (2009) :Chen, G.I., et al. J. Biol. Chem. 283(43):29273-29284(2008)Nakada, S., et al. EMBO Rep. 9(10):1019-1026(2008)