

PPP4C Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13756c

Specification

PPP4C Antibody (Center) - Product Information

Application	IHC-P, WB,E
Primary Accession	P60510
Other Accession	Q6IP91 , Q5BJ92 , P11084 , P97470 , A6H772 , A9JRC7 , A8WGP3 , NP_002711.1
Reactivity	Human
Predicted	Zebrafish, Bovine, Mouse, Rabbit, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35080
Antigen Region	160-189

PPP4C Antibody (Center) - 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

This PPP4C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 160-189 amino acids from the Central region of human PPP4C.

Dilution

IHC-P~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PPP4C Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PPP4C Antibody (Center) - 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

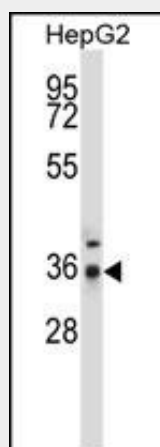
Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

PPP4C Antibody (Center) - Protocols

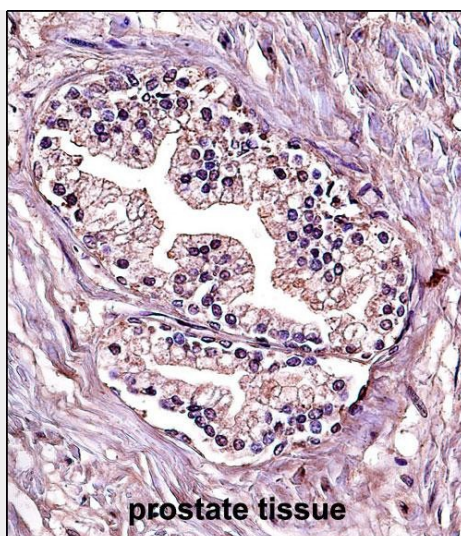
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PPP4C Antibody (Center) - Images



PPP4C Antibody (Center) (Cat. #AP13756c) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the PPP4C antibody detected the PPP4C protein (arrow).



PPP4C Antibody (Center) (Cat. #AP13756c) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of PPP4C Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

PPP4C Antibody (Center) - 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) - 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)