

PPP4C Antibody

Goat Polyclonal Antibody Catalog # ALS12871

Specification

PPP4C Antibody - Product Information

Application WB, IHC Primary Accession P60510

Reactivity Human, Mouse, Rat, Rabbit, Zebrafish,

Hamster, Monkey, Horse, Xenopus, Bovine,

Dog Goat Polyclonal 35kDa KDa

Host Clonality Calculated MW

PPP4C Antibody - Additional Information

Gene ID 5531

Other Names

Serine/threonine-protein phosphatase 4 catalytic subunit, PP4C, Pp4, 3.1.3.16, Protein phosphatase X, PP-X, PPP4C, PPP4, PPX

Target/Specificity

Human PPP4C.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

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

PPP4C Antibody - 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

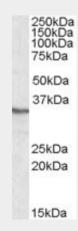
Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

PPP4C Antibody - Protocols

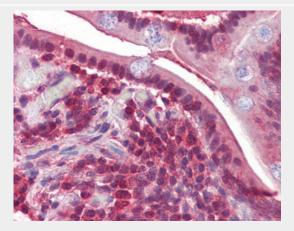
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PPP4C Antibody - Images

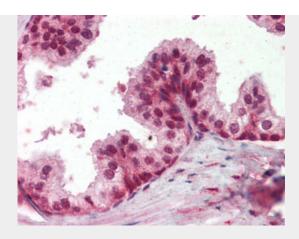


Antibody (0.3 ug/ml) staining of HEK293 lysate (35 ug protein in RIPA buffer).



Anti-PPP4C antibody IHC of human small intestine.





Anti-PPP4C antibody IHC of human prostate.

PPP4C Antibody - Background

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PPP4C Antibody - References

Brewis N.D., et al.Biochim. Biophys. Acta 1171:231-233(1992). Cohen P.T.W., et al.Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases. Hu M.C.-T., et al.J. Biol. Chem. 273:33561-33565(1998). Zhou G., et al.J. Biol. Chem. 277:6391-6398(2002). Mourtada-Maarabouni M., et al.Cell Death Differ. 10:1016-1024(2003).