

## PPP4C Antibody (aa294-307)

Rabbit Polyclonal Antibody Catalog # ALS11552

## **Specification**

# PPP4C Antibody (aa294-307) - Product Information

Application IHC Primary Accession P60510

Reactivity Human, Mouse, Rat, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 35kDa KDa

## PPP4C Antibody (aa294-307) - 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

Amino acids 294 to 307 of PPP4C

### **Reconstitution & Storage**

+4°C or -20°C, Avoid repeated freezing and thawing.

### **Precautions**

PPP4C Antibody (aa294-307) is for research use only and not for use in diagnostic or therapeutic procedures.

# PPP4C Antibody (aa294-307) - 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**

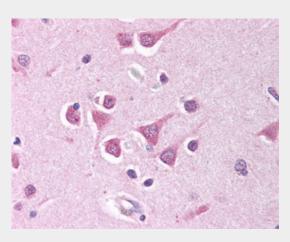
Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

# PPP4C Antibody (aa294-307) - Protocols

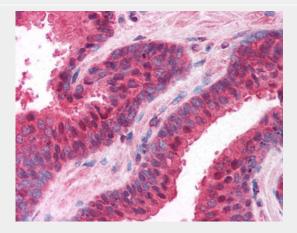
Provided below are standard protocols that you may find useful for product applications.

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

# PPP4C Antibody (aa294-307) - Images



Anti-PPP4C antibody IHC of human brain, cortex.



Anti-PPP4C antibody IHC of human prostate.

# PPP4C Antibody (aa294-307) - Background

Protein phosphatase that is involved in many processes such as microtubule organization at





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centrosomes, maturation of spliceosomal snRNPs, apoptosis, DNA repair, tumor necrosis factor (TNF)-alpha signaling, activation of c-lun 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 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.

## PPP4C Antibody (aa294-307) - 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).