

**Goat Anti-PPP4C Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1859a****Specification**

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**Goat Anti-PPP4C Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P60510</a>
Other Accession	<a href="#">NP_002711</a> , <a href="#">5531</a> , <a href="#">171366 (rat)</a>
Reactivity	Human, Rat
Predicted	Rabbit, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	35080

**Goat Anti-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

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

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

**Goat Anti-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

#### Goat Anti-PPP4C Antibody - Protocols

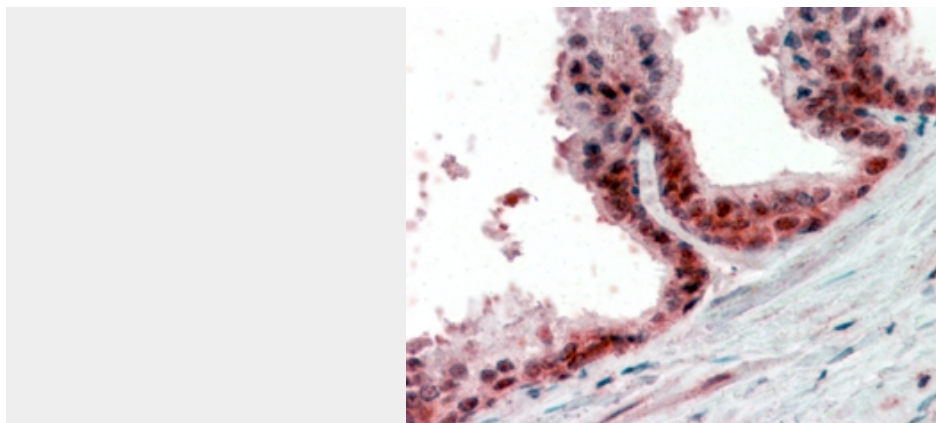
Provided below are standard protocols that you may find useful for product applications.

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

#### Goat Anti-PPP4C Antibody - Images



AF1859a (0.3 µg/ml) staining of HEK293 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1859a (2.5 µg/ml) staining of paraffin embedded Human Prostate. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

#### **Goat Anti-PPP4C Antibody - References**

A PP4 phosphatase complex dephosphorylates RPA2 to facilitate DNA repair via homologous recombination. Lee DH, et al. Nat Struct Mol Biol, 2010 Mar. PMID 20154705.

Protein phosphatase 4 regulates apoptosis in leukemic and primary human T-cells.

Mourtada-Maarabouni M, et al. Leuk Res, 2009 Nov. PMID 19539371.

Association and mutation analyses of 16p11.2 autism candidate genes. Kumar RA, et al. PLoS One, 2009. PMID 19242545.

PP4 is a gamma H2AX phosphatase required for recovery from the DNA damage checkpoint.

Nakada S, et al. EMBO Rep, 2008 Oct. PMID 18758438.

PP4R4/KIAA1622 forms a novel stable cytosolic complex with phosphoprotein phosphatase 4. Chen GI, et al. J Biol Chem, 2008 Oct 24. PMID 18715871.