

PPP6C Antibody
Rabbit Polyclonal Antibody
Catalog # ALS11512**Specification**

PPP6C Antibody - Product Information

Application	IHC
Primary Accession	O00743
Reactivity	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35kDa KDa

PPP6C Antibody - Additional Information**Gene ID** 5537**Other Names**

Serine/threonine-protein phosphatase 6 catalytic subunit, PP6C, 3.1.3.16, Serine/threonine-protein phosphatase 6 catalytic subunit, N-terminally processed, PPP6C, PPP6

Reconstitution & Storage

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

Precautions

PPP6C Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PPP6C Antibody - Protein Information**Name** PPP6C {ECO:0000303|PubMed:29053956, ECO:0000312|HGNC:HGNC:9323}**Function**

Catalytic subunit of protein phosphatase 6 (PP6) (PubMed: [17079228](http://www.uniprot.org/citations/17079228), PubMed: [29053956](http://www.uniprot.org/citations/29053956), PubMed: [32474700](http://www.uniprot.org/citations/32474700)). PP6 is a component of a signaling pathway regulating cell cycle progression in response to IL2 receptor stimulation (PubMed: [10227379](http://www.uniprot.org/citations/10227379)). N-terminal domain restricts G1 to S phase progression in cancer cells, in part through control of cyclin D1 (PubMed: [17568194](http://www.uniprot.org/citations/17568194)). During mitosis, regulates spindle positioning (PubMed: [27335426](http://www.uniprot.org/citations/27335426)). Down-regulates MAP3K7 kinase activation of the IL1 signaling pathway by dephosphorylation of MAP3K7 (PubMed: [17079228](http://www.uniprot.org/citations/17079228)). Participates also in the innate immune defense against viruses by desphosphorylating RIGI, an essential step that triggers RIGI-mediated signaling activation (PubMed: [29053956](http://www.uniprot.org/citations/29053956)).

Also regulates innate immunity by acting as a negative regulator of the cGAS-STING pathway: mediates dephosphorylation and inactivation of CGAS and STING1 (PubMed:32753499, PubMed:32474700). CGAS dephosphorylation at 'Ser-435' impairs its ability to bind GTP, thereby inactivating it (PubMed:32474700).

Cellular Location

Mitochondrion. Cytoplasm

Tissue Location

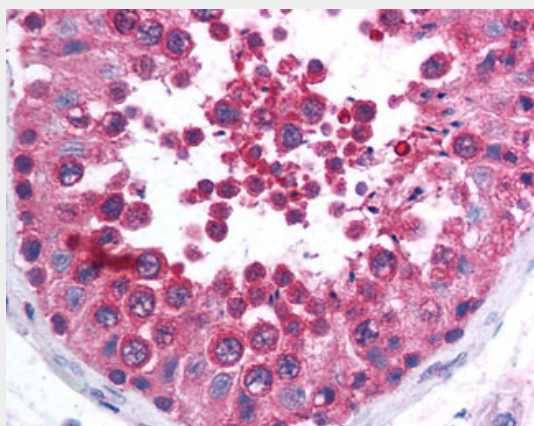
Ubiquitously expressed in all tissues tested with highest expression levels in testis, heart, kidney, brain, stomach, liver and skeletal muscle and lowest in placenta, lung colon and spleen.

PPP6C 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](#)

PPP6C Antibody - Images



Anti-PPP6C antibody IHC of human testis.

PPP6C Antibody - Background

Catalytic subunit of protein phosphatase 6 (PP6). PP6 is a component of a signaling pathway regulating cell cycle progression in response to IL2 receptor stimulation. N-terminal domain restricts G1 to S phase progression in cancer cells, in part through control of cyclin D1. Downregulates MAP3K7 kinase activation of the IL1 signaling pathway by dephosphorylation of MAP3K7.

PPP6C Antibody - References

Bastians H., et al. J. Cell Sci. 109:2865-2874(1996).

Filali M.,et al.J. Cell. Biochem. 73:153-163(1999).

Ota T.,et al.Nat. Genet. 36:40-45(2004).

Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.

Humphray S.J.,et al.Nature 429:369-374(2004).