

Rabbit PPP4C Polyclonal Antibody | anti-PPP4C antibody

PPP4C Antibody

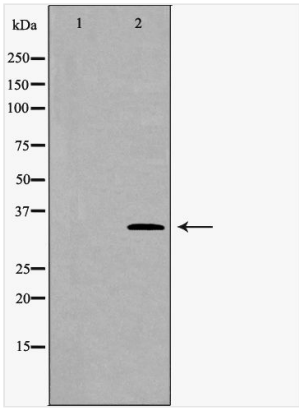
CATALOG # AAA326592	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
-------------------------------	-----------------------	--	--

PRODUCT SYNONYMS

PPP4C; Polyclonal Antibody; PPP4C Antibody; PP X; PP-X; Pp4; PP4C; PP4C_HUMAN; PPH3; PPP4; ppp4c; PPX; protein phosphatase 4 (formerly X); catalytic subunit; Protein phosphatase 4 catalytic subunit; Protein phosphatase X; protein phosphatase X; Serine/threonine protein phosphatase 4 catalytic subunit; Serine/threonine-protein phosphatase 4 catalytic subunit; anti-PPP4C antibody

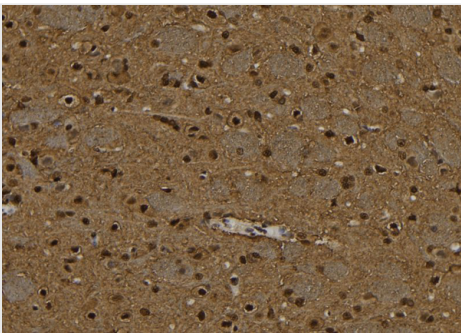
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PPP4C antibody detects endogenous levels of total PPP4C
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	307
Applicable Applications for anti-PPP4C antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PPP4C
Subcellular Location	Cytoplasm. Nucleus. Cytoplasm > Cytoskeleton > Centrosome.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Xenopus
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)

Western blot analysis of HepG2 cell lysate, using PPP4C Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326592 at 1/100 staining Rat brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-PPP4C antibody

Description: In eukaryotes, the phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions, including division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the protein phosphatases. In general, the protein phosphatase (PP) holoenzyme is a trimeric complex composed of a regulatory subunit, a variable subunit and a catalytic subunit. Four major families of protein phosphatase catalytic subunits have been identified, designated PP1, PP2A, PP2B (calcineurin) and PP2C. An additional protein phosphatase catalytic subunit, PPX (also known as PP4) is a putative member of a novel PP family.

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 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.

Subunit Structure: Serine/threonine-protein phosphatase 4 (PP4) occurs in different assemblies of the catalytic and one or more regulatory subunits (PubMed:12668731, PubMed:18715871, PubMed:16085932, PubMed:18614045). Component of the PP4 complexes PPP4C-PPP4R1, PPP4C-PPP4R2, PPP4C-PPP4R2-PPP4R3A, PPP4C-PPP4R2-PPP4R3B and PPP4C-PPP4R4 (PubMed:12668731, PubMed:18715871, PubMed:16085932, PubMed:18614045). The PPP4C-PPP4R2 complex appears to be a tetramer composed of 2 molecules of PPP4C and 2 molecules of PPP4R2 (PubMed:12668731). Interacts with REL, NFKB1/p50 and RELA (PubMed:1336397). Interacts with SMN1 and GEMIN4 (PubMed:12668731). Interacts with IRS4 (phosphorylated) (PubMed:15331607). Interacts with SMEK1/PPP4R3A; the interaction requires PP4R2 (PubMed:16085932). Interacts with HDAC3 (PubMed:15805470).

Post-translational Modifications: Methylation at the C-terminal Leu-307 is critical for interactions with regulatory subunits and functions in DNA repair.

Similarity: Belongs to the PPP phosphatase family. PP-4 (PP-X) subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	746816144
NCBI GeneID	5531
NCBI Accession #	NP_001290432.1
NCBI GenBank Nucleotide #	NM_001303503.1
UniProt Accession #	P60510; P33172

Molecular Weight	Observed: 35 kDa Predicted: 36 kDa
NCBI Official Full Name	serine/threonine-protein phosphatase 4 catalytic subunit isoform 1
NCBI Official Synonym Full Names	protein phosphatase 4 catalytic subunit
NCBI Official Symbol	PPP4C
NCBI Official Synonym Symbols	PP4; PPX; PP-X; PP4C; PPH3; PPP4
NCBI Protein Information	serine/threonine-protein phosphatase 4 catalytic subunit
UniProt Protein Name	Serine/threonine-protein phosphatase 4 catalytic subunit
UniProt Gene Name	PPP4C
UniProt Synonym Gene Names	PPP4; PPX; PP4C; Pp4; PP-X

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
 Online datasheet: <https://stage.aaabiotech.com/polyclonal/ppp4c-antibody-immunohistochemistry-western-blot-elisa/326592>