

Mouse anti-Human Protein Phosphatase 4C Monoclonal Antibody | anti-PPP4C antibody

Protein Phosphatase 4C Mouse mAb

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA320305	Mouse	Human	Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Protein Phosphatase 4C; Monoclonal Antibody; Protein Phosphatase 4C Mouse mAb; 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	Mouse
Reactivity	Human
Clonality	Monoclonal
Specificity	This antibody detects endogenous levels of Protein Phosphatase 4C and does not cross-react with related proteins.
Purity/Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Form/Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-PPP4C antibody	ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Purified recombinant human Protein Phosphatase 4C protein fragments expressed in E coli.
Modification	Unmodified/Total
Catalytic Activity	$A \text{ phosphoprotein} + H(2)O = a \text{ protein} + \text{phosphate.}$
Cofactor	Binds 1 iron ion per subunit. Binds 1 manganese ion per subunit.
Function	Protein phosphatase that is involved in many processes such as microtubule organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, 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 DSB repair. Dephosphorylates NDEL1 at CDC2/Cdk1 phosphorylation sites and negatively regulates CDC2/Cdk1 activity in interphase. Belongs to the PPP phosphatase family. Belongs to the PPP phosphatase family. PP-4 (PP-X) subfamily.
Subunit	Serine/threonine-protein phosphatase 4 (PP4) occurs in different assemblies of the catalytic and one or more regulatory subunits. Component of the PP4 complexes PPP4C-PPP4R1, PPP4C-PPP4R2, PPP4C-PPP4R2-PPP4R3A, PPP4C-PPP4R2-PPP4R3B and PPP4C-PPP4R4. The PPP4C-PPP4R2 complex appears to be a tetramer composed of 2 molecules of PPP4C and 2 molecules of PPP4R2. Interacts with REL, NFKB1/p50 and RELA. Interacts with SMN1 AND GEMIN4. Interacts with IRS4 (phosphorylated). Interacts with SMEK1/PPP4R3A; the interaction requires PP4R2. Interacts with HDAC3.
Preparation and Storage	Store at -20 degree C/1 year

IMAGES

Application Data



ICC (Immunocytochemistry)

Immunocytochemistry of HeLa cells using anti-Protein Phosphatase 4C mouse mAb diluted 1:200.



IHC (Immunohistochemistry)

IHC of paraffin-embedded human breast cancer using anti-Protein Phosphatase 4C mouse mAb diluted 1/500-1/1000.



WB (Western Blot)

Western blot detection of Protein Phosphatase 4C in Hela and Jurkat cell lysates using Protein Phosphatase 4C mouse mAb (1:200 diluted). Predicted band size: 34KDa. Observed band size: 34KDa.



ADDITIONAL INFORMATION

Product Categories/Family for anti-PPP4C antibody	Primary Antibodies
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NCBI AND UNIPROT INFORMATION

NCBI GI #	44888846
NCBI GeneID	5531
UniProt Accession #	P60510; P33172
Molecular Weight	307
NCBI Official Full Name	Serine/threonine-protein phosphatase 4 catalytic subunit
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; protein phosphatase X, catalytic subunit; protein phosphatase 4 (formerly X), 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
UniProt Entry Name	PP4C_HUMAN

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.