



Protein Phosphatase 4C mouse mAb

Catalog No	YP-Ab-14210
Isotype	IgG
Reactivity	Human
Applications	WB;IHC;ICC
Gene Name	ppp4c
Immunogen	Purified recombinant human Protein Phosphatase 4C protein fragments expressed in E.coli.
Specificity	This antibody detects endogenous levels of Protein Phosphatase 4C and does not cross-react with related proteins.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb 1:200 icc 1:200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	EC:3.1.3.16;PP X;PP4;PP4C;PPH3;PPX;ppp4c;PP-X;PP4C_HUMAN;PPP4; protein phosphatase 4 (formerly X);catalytic subunit;Protein phosphatase 4 catalytic subunit;Protein phosphatase X;Serine/threonine protein phosphatase 4 catalytic subunit;Serine/threonine-protein phosphatase 4 catalytic subunit.
Observed Band	34kD
Calculated Molecular Weight	34kD
Cell Pathway	Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome.
Tissue Specificity	Placenta,
Function	catalytic activity:A phosphoprotein + H(2)O = a protein + phosphate., cofactor: Binds 1 iron ion per subunit.,cofactor: 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.,si

Background

catalytic activity:A phosphoprotein + H(2)O = a protein + phosphate., cofactor:binds 1 iron ion per subunit.,cofactor: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.,similarity:Belongs to the PPP phosphatase family.,similarity: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.,

matters needing attention

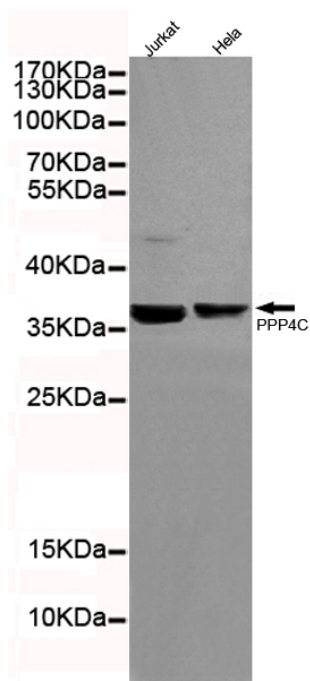
Avoid repeated freezing and thawing!

Usage suggestions

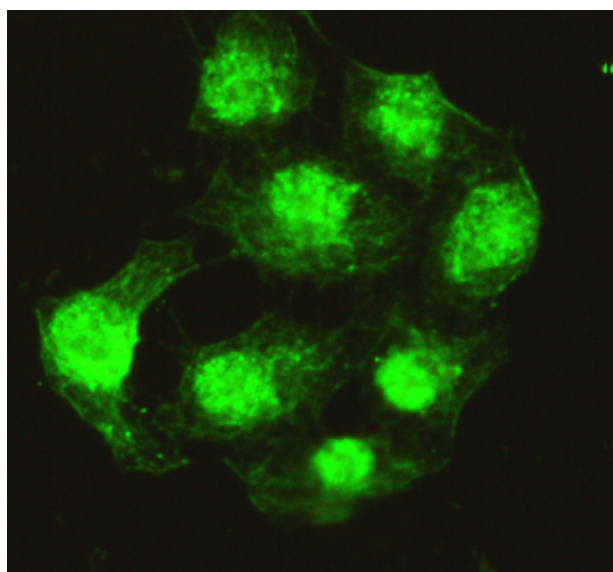
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



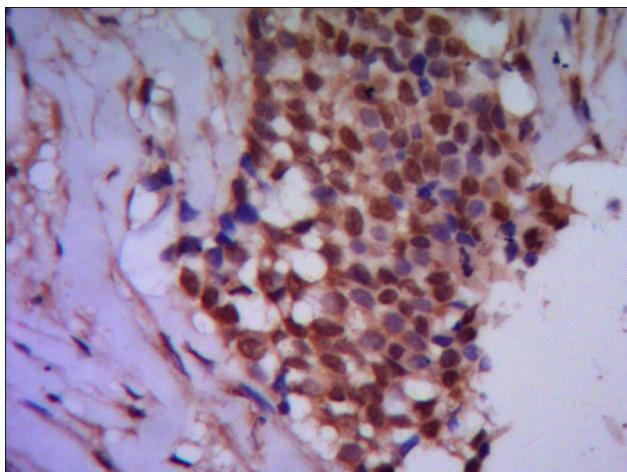
Products Images



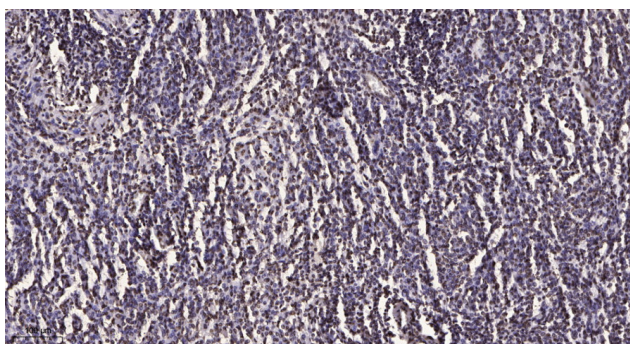
Western blot detection of Protein Phosphatase 4C in HeLa and Jurkat cell lysates using Protein Phosphatase 4C mouse mAb (1:200 diluted). Predicted band size: 34KDa. Observed band size: 34KDa.



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



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



Immunohistochemical analysis of paraffin-embedded human brain tumor. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).