



PPX Monoclonal Antibody

Catalog No	YP-Ab-14205
Isotype	IgG
Reactivity	Human;Mouse;Rat;Bovine;Dog;Zebrafish
Applications	WB;IHC;IF
Gene Name	PPP4C
Protein Name	Serine/threonine-protein phosphatase 4 catalytic subunit
Immunogen	Purified recombinant human PPX protein fragments expressed in E.coli.
Specificity	PPX Monoclonal Antibody detects endogenous levels of PPX protein.
Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/1000 - 1/2000. Immunohistochemistry: 1/500 - 1/1000. Immunofluorescence: 1/100 - 1/500. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PPP4C; PPP4; PPX; Serine/threonine-protein phosphatase 4 catalytic subunit; PP4C; Pp4; Protein phosphatase X; PP-X
Observed Band	
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

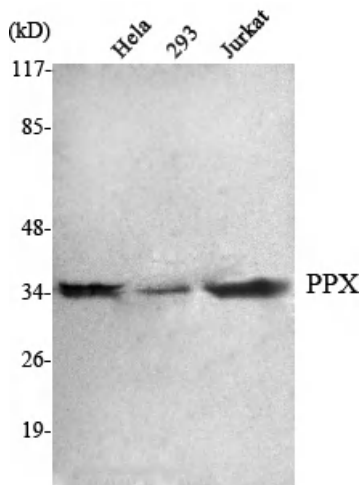
Avoid repeated freezing and thawing!

Usage suggestions

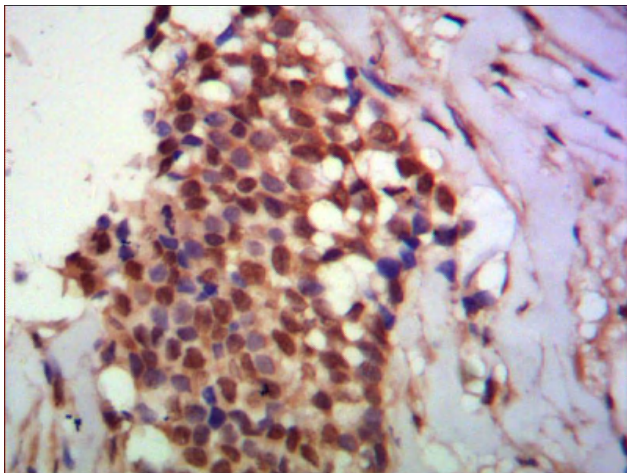
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



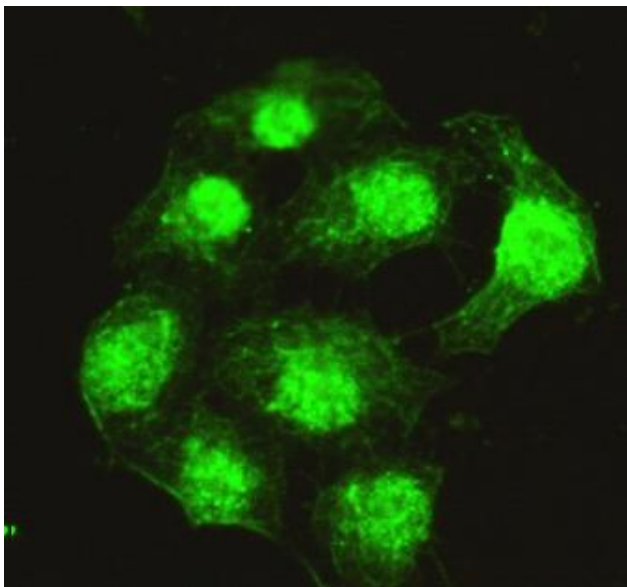
Products Images



Western Blot analysis using PPX Monoclonal Antibody against HeLa, 293, Jurkat cell lysate.



Immunohistochemistry analysis of paraffin-embedded human breast cancer using PPX Monoclonal Antibody.



Immunofluorescence analysis of HeLa cells using PPX Monoclonal Antibody.