

## **PPX Monoclonal Antibody**

Catalog No: YM1083

Reactivity: Human; Mouse; Rat; Bovine; Dog; Zebrafish

**Applications:** WB;IHC;IF

Target: PPX

**Fields:** >>Glucagon signaling pathway

P97470

Gene Name: PPP4C

**Protein Name:** Serine/threonine-protein phosphatase 4 catalytic subunit

Human Gene Id: 5531

**Human Swiss Prot** 

ss Prot P60510

No:

Mouse Gene Id: 56420

**Mouse Swiss Prot** 

No:

**Rat Gene Id:** 171366

Rat Swiss Prot No: Q5BJ92

**Immunogen:** Purified recombinant human PPX protein fragments expressed in E.coli.

**Specificity:** PPX Monoclonal Antibody detects endogenous levels of PPX protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source:** Monoclonal, Mouse

**Dilution:** WB 1:1000 - 1:2000. IHC 1:500 - 1:1000. IF 1:100 - 1:500. Not yet tested in

other applications.



**Purification :** Affinity purification

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 35kD

**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.,

**Function:** 

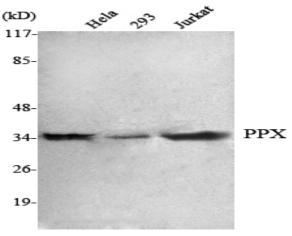
catalytic activity:A phosphoprotein + H(2)O = a protein + phosphate.,cofactor:Binds 1 iron ion per subunit.,cofactor:Binds 1 manganese ion per subunit.,function:Protein phosphatase that is involved in many processes such as microtubule organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, 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

Subcellular Location:

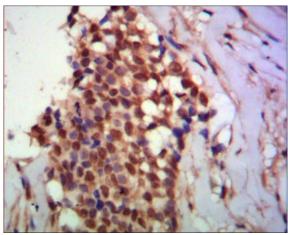
Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome.

**Expression :** Placenta,

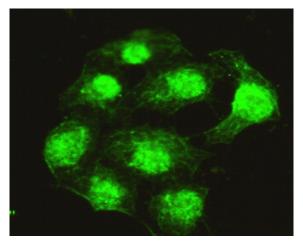
## **Products Images**



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.