



# PPX Monoclonal Antibody

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| <b>Catalog No</b>                  | YP-mAb-14205                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Gene Name</b>                   | PPP4C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Immunogen</b>                   | Purified recombinant human PPX protein fragments expressed in E.coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Specificity</b>                 | PPX Monoclonal Antibody detects endogenous levels of PPX protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Formulation</b>                 | Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Source</b>                      | Monoclonal, Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Synonyms</b>                    | EC:3.1.3.16;PP X;PP4;PP4C;PPH3;PPX;PPP4C;Serine/threonine-protein phosphatase 4 catalytic subunit;PPP4;Protein phosphatase X;PP-X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Observed Band</b>               | 35kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Calculated Molecular Weight</b> | 35kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Cell Pathway</b>                | Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Tissue Specificity</b>          | Placenta,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Function</b>                    | 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.,

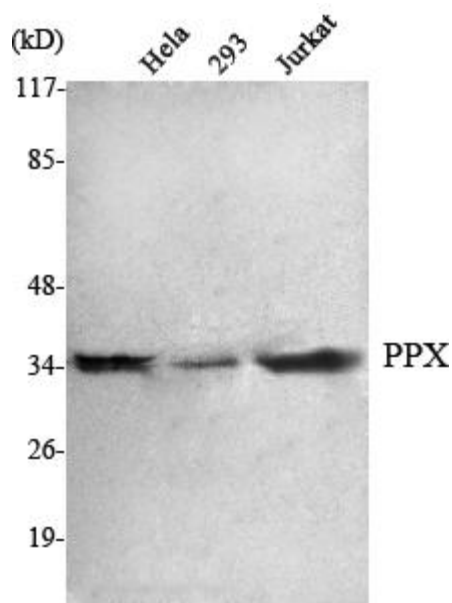
## matters needing attention

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 of various cells using PPX Monoclonal Antibody