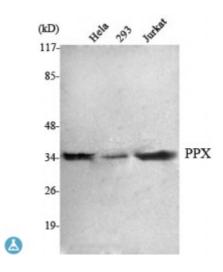


## **Anti-PPX** antibody



**Description** Mouse monoclonal to PPX.

Model STJ98539

**Host** Mouse

**Reactivity** Bovine, Canine, Human, Mouse, Rat, Zebrafish

**Applications** IF, IHC, WB

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

**Gene ID** <u>5531</u>

Gene Symbol PPP4C

**Dilution range** WB 1:1000-1:2000IHC 1:500-1:1000IF 1:100-1:500

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

**Purification** Affinity purification

**Note** For Research Use Only (RUO).

**Protein Name** Serine/threonine-protein phosphatase 4 catalytic subunit PP4C Pp4 Protein

phosphatase X PP-X

**Clonality** Monoclonal

**Conjugation** Unconjugated

**Formulation** Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4,

150 mM NaCl) with 0.2% sodium azide, 50% glycerol.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:9319OMIM:602035</u>

Alternative Names Serine/threonine-protein phosphatase 4 catalytic subunit PP4C Pp4 Protein

phosphatase X PP-X

**Function** Protein phosphatase that is involved in many processes such as microtubule

organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, DNA repair, 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 double strand break repair. Dephosphorylates NDEL1 at CDK1 phosphorylation sites and negatively regulates CDK1 activity in interphase . In response to DNA damage, catalyzes RPA2 dephosphorylation, an essential step for DNA repair

since it allows the efficient RPA2-mediated recruitment of RAD51 to

chromatin.

Cellular Localization Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center,

centrosome.

**Post-translational** Methylation at the C-terminal Leu-307 is critical for interactions with

**Modifications** regulatory subunits and functions in DNA repair.

St John's Laboratory Ltd

**F** +44 (0)207 681 2580

T +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com