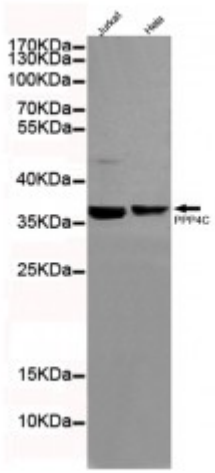
Anti-Protein Phosphatase 4C antibody



Description	Mouse monoclonal to Protein Phosphatase 4C.

Model	STJ99049
Host	Mouse
Reactivity	Human
Applications	ELISA, WB
Immunogen	Purified recombinant human Phosphatase 4C fragments expressed in Ecoli
Gene ID	5531
Gene Symbol	PPP4C
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	This antibody detects endogenous levels of Protein Phosphatase 4C and does not cross-react with related proteins.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clone ID	2F11-D10-G4
Note	For Research Use Only (RUO).
Protein Name	Serine/threonine-protein phosphatase 4 catalytic subunit PP4C Pp4 Protein phosphatase X PP-X
Molecular Weight	34kDa
Clonality	Monoclonal
Conjugation	Unconjugated

Isotype	IgG2a
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:9319OMIM:602035
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 Modifications	Methylation at the C-terminal Leu-307 is critical for interactions with regulatory subunits and functions in DNA repair.