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KD-Validated Anti-PPP4C Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI2094

Specification

KD-Validated Anti-PPP4C Mouse Monoclonal Antibody - Product Information

Application	**WB**
Primary Accession	P60510
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG2b**
Calculated MW	**Predicted, 35 kDa, observed, 32 kDa KDa**
Gene Name	**PPP4C**
Aliases	**PPP4C; Protein Phosphatase 4 Catalytic Subunit; PPX; PP4; Serine/Threonine-Protein Phosphatase 4 Catalytic Subunit; Protein Phosphatase 4 (Formerly X), Catalytic Subunit; Protein Phosphatase X, Catalytic Subunit; EC 3.1.3.16; PP-X; PP4C; PPP4; Epididymis Secretory Sperm Binding Protein; Protein Phosphatase 4, Catalytic Subunit; Protein Phosphatase X; PPH3; Pp4**
Immunogen	**Recombinant protein of human PPP4C**

KD-Validated Anti-PPP4C Mouse Monoclonal Antibody - Additional Information

Gene ID	**5531**

Other Names
Serine/threonine-protein phosphatase 4 catalytic subunit, PP4C, Pp4, 3.1.3.16, Protein phosphatase X, PP-X, PPP4C, PPP4, PPX

KD-Validated Anti-PPP4C Mouse Monoclonal Antibody - Protein Information

Name PPP4C

Synonyms PPP4, PPX

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 H2AX phosphorylated on Ser-140 (gamma-H2AX) 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 (By similarity). 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.

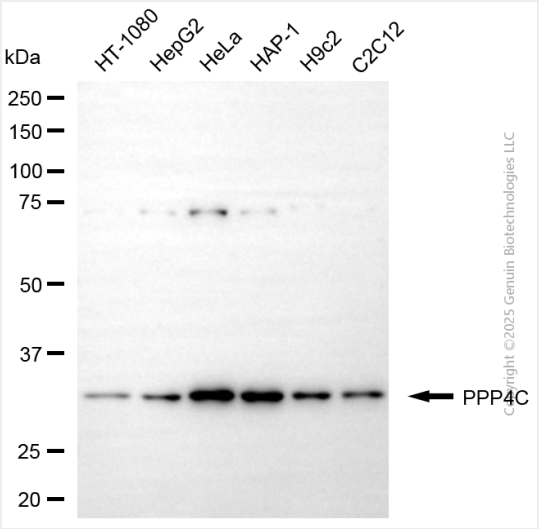
Cellular Location
Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

KD-Validated Anti-PPP4C Mouse Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-PPP4C Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-PPP4C antibody (Cat#AGI2094). Total cell lysates (20 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-PPP4C antibody (Cat#AGI2094, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.

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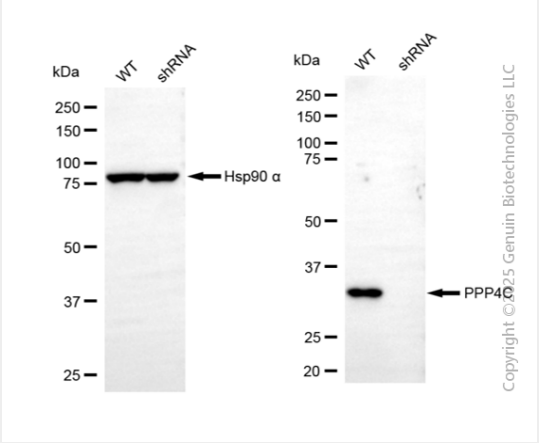

Western blotting analysis using anti-PPP4C antibody (Cat#AGI2094). PPP4C expression in wild-type (WT) and PPP4C shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-PPP4C antibody (Cat#AGI2094, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.