

#### KD-Validated Anti-PPP4C Mouse Monoclonal Antibody Mouse monoclonal antibody Catalog # AGI2095

# **Specification**

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

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases WB P60510 Rat, Human, Mouse **Monoclonal** Mouse IgG2a Predicted, 35 kDa, observed, 32 kDa KDa PPP4C **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 **Recombinant protein of human PPP4C** 

Immunogen

## **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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# **KD-Validated Anti-PPP4C Mouse Monoclonal Antibody - Images**



Western blotting analysis using anti-PPP4C antibody (Cat#AGI2095). 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#AGI2095, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.





Western blotting analysis using anti-PPP4C antibody (Cat#AGI2095). PPP4C expression in wild-type (WT) and PPP4C shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-PPP4C antibody (Cat#AGI2095, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.