

## PPP4R2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18485c

#### Specification

# **PPP4R2 Antibody (Center) - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q9NY27</u> <u>NP\_777567.1</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 46898 228-254

# PPP4R2 Antibody (Center) - Additional Information

Gene ID 151987

**Other Names** Serine/threonine-protein phosphatase 4 regulatory subunit 2, PPP4R2

#### Target/Specificity

This PPP4R2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 228-254 amino acids from the Central region of human PPP4R2.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** PPP4R2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# PPP4R2 Antibody (Center) - Protein Information

Name PPP4R2

**Function** Regulatory subunit of serine/threonine-protein phosphatase 4 (PP4). May regulate the activity of PPP4C at centrosomal microtubule organizing centers. Its interaction with the SMN



complex leads to enhance the temporal localization of snRNPs, suggesting a role of PPP4C in maturation of spliceosomal snRNPs. 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. Mediates RPA2 dephosphorylation by recruiting PPP4C to RPA2 in a DNA damage-dependent manner. RPA2 dephosphorylation is required for the efficient RPA2-mediated recruitment of RAD51 to chromatin following double strand breaks, an essential step for DNA repair.

#### **Cellular Location**

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Note=Ionizing radiation induces relocalization to nuclear foci and colocalization with RPA2

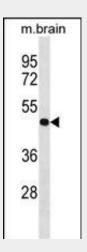
**Tissue Location** Widely expressed..

#### **PPP4R2 Antibody (Center) - 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>

#### PPP4R2 Antibody (Center) - Images



PPP4R2 Antibody (Center) (Cat. #AP18485c) western blot analysis in mouse brain tissue lysates (35ug/lane).This demonstrates the PPP4R2 antibody detected the PPP4R2 protein (arrow).

#### PPP4R2 Antibody (Center) - Background

Regulatory subunit of serine/threonine-protein phosphatase 4 (PP4). May regulate the activity of PPP4C at centrosomal microtubule organizing centers. Its interaction with the SMN complex leads to enhance the temporal localization of snRNPs, suggesting a role of PPP4C in maturation of spliceosomal snRNPs. 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.

## **PPP4R2 Antibody (Center) - References**

Lee, D.H., et al. Nat. Struct. Mol. Biol. 17(3):365-372(2010) Chen, G.I., et al. J. Biol. Chem. 283(43):29273-29284(2008) Chowdhury, D., et al. Mol. Cell 31(1):33-46(2008) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) : Gingras, A.C., et al. Mol. Cell Proteomics 4(11):1725-1740(2005)