

### **PP4R2 Polyclonal Antibody**

**Catalog # AP72017** 

### **Specification**

### **PP4R2 Polyclonal Antibody - Product Information**

Application WB, IHC-P Primary Accession Q9NY27

Reactivity Human, Monkey

Host Rabbit Clonality Polyclonal

# **PP4R2 Polyclonal Antibody - Additional Information**

Gene ID 151987

#### **Other Names**

PPP4R2; SBBI57; Serine/threonine-protein phosphatase 4 regulatory subunit 2

#### Dilution

WB $\sim\sim$ Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.

IHC-P~~N/A

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

#### **Storage Conditions**

-20°C

### **PP4R2 Polyclonal Antibody - 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



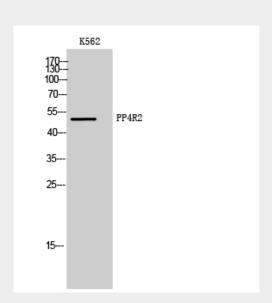
**Tissue Location** Widely expressed...

# **PP4R2 Polyclonal Antibody - Protocols**

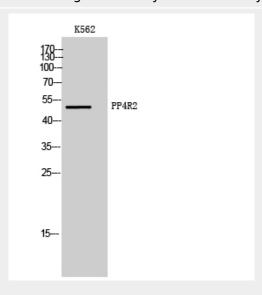
Provided below are standard protocols that you may find useful for product applications.

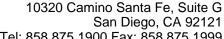
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **PP4R2 Polyclonal Antibody - Images**



Western Blot analysis of K562 cells using PP4R2 Polyclonal Antibody







Tel: 858.875.1900 Fax: 858.875.1999

# Western Blot analysis of K562 cells using PP4R2 Polyclonal Antibody

## PP4R2 Polyclonal Antibody - 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 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.