



## Rabbit Anti-PP1A antibody

SL3756R

<b>Product Name:</b>	PP1A
<b>Chinese Name:</b>	蛋白磷酸酶2C $\alpha$ 抗体
<b>Alias:</b>	PP 1A; PP2C ALPHA; PP2CA; PPP1CA; Protein Phosphatase 2C Alpha Isoform; Serine threonine protein phosphatase PP1 alpha catalytic subunit; EC 3.1.3.16; MGC15877; MGC1674; MGC9201.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Horse,Rabbit,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	42kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human PP1A/PP2CA:281-382/382
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	PPP1A is a serine/threonine protein phosphatase catalytic subunit that is essential for regulating cellular stress responses in eukaryotes. It binds to magnesium or manganese ions and exists as a monomer. It is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. PPP1A is involved in the regulation long term synaptic plasticity and may play an important role

in dephosphorylating substrates such as Ca<sup>2+</sup>/calmodulin dependent protein kinase II.

**Function:**

Enzyme with a broad specificity. Negatively regulates TGF-beta signaling through dephosphorylating SMAD2 and SMAD3, resulting in their dissociation from SMAD4, nuclear export of the SMADs and termination of the TGF-beta-mediated signaling.

**Subunit:**

Monomer. Interacts with SMAD2; the interaction dephosphorylates SMAD2 in its C-terminal SXS motif resulting in disruption of the SMAD2/SMAD4 complex, SMAD2 nuclear export and termination of the TGF-beta-mediated signaling. Interacts with SMAD2; the interaction dephosphorylates SMAD2 in its C-terminal SXS motif resulting in disruption of the SMAD2/SMAD4 complex, SMAD2 nuclear export and termination of the TGF-beta-mediated signaling.

**Subcellular Location:**

Nucleus.

**Similarity:**

Belongs to the PP2C family.

**SWISS:**

P62136

**Gene ID:**

5499

**Database links:**

[Entrez Gene: 5499](#)Human

[Entrez Gene: 19045](#)Mouse

[Entrez Gene: 24668](#)Rat

[Omin: 176875](#)Human

[SwissProt: P62136](#)Human

[SwissProt: P62137](#)Mouse

[SwissProt: P62138](#)Rat

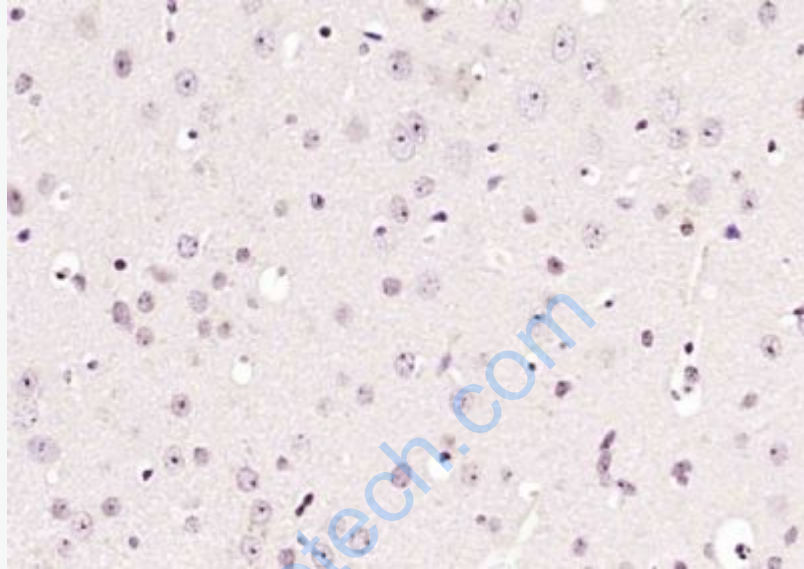
[Unigene: 183994](#)Human

[Unigene: 1970](#)Mouse

[Unigene: 2024](#)Rat

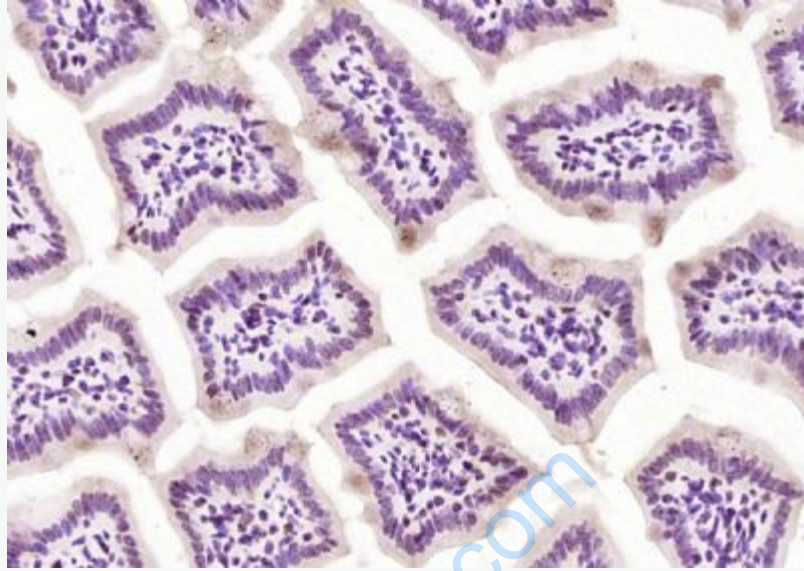
**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PP1A) Polyclonal Antibody, Unconjugated (SL3756R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse intestine); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PP1A) Polyclonal Antibody, Unconjugated (SL3756R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.