# PP2A(Phospho-Y307) Rabbit mAb

Catalog No: #13369

Package Size: #13369-1 50ul #13369-2 100ul



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

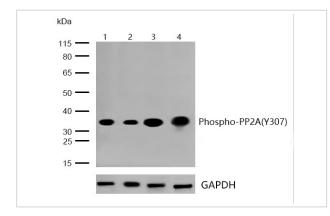
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Product Name	PP2A(Phospho-Y307) Rabbit mAb	
Host Species	Recombinant Rabbit	
Clonality	Monoclonal	
Clone No.	ST49-05	
Isotype	IgG	
Purification	ProA affinity purified	
Applications	WB;ICC/IF;IHC	
Species Reactivity	Human;Mouse;Rat	
Immunogen Description	Synthetic phospho-peptide corresponding to residues surrounding Tyr307 of human PP2A.	
Conjugates	Unconjugated	
Target Name	PPP2CB	
Other Names	PP2A A antibody PP2A alpha antibody PP2A B antibody PP2A beta antibody PP2A-alpha antibody	
	PP2AA_HUMAN antibody PP2Ac antibody PP2CB antibody PPP2CA antibody PPP2CB antibody Protein	
	phosphatase 2 catalytic subunit alpha isoform antibody Protein phosphatase 2 catalytic subunit beta isoform	
	antibody Replication protein C antibody RP C antibody RP-C antibody Serine/threonine protein	
	phosphatase 2A catalytic subunit alpha isoform antibody Serine/threonine protein phosphatase 2A catalytic	
	subunit beta isoform antibody Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform	
	antibody	
Accession No.	Swiss-Prot#:P62714	
Calculated MW	35 kDa	
SDS-PAGE MW	35 kDa	
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.	
Storage	Store at -20°C	

## **Application Details**

WB: 1:500-1:2000 ICC/IF: 1:50-1:200 IHC: 1:50-1:200

# **Images**



All lanes: PP2A(Phospho-Y307) Rabbit mAb at 1/1k dilution

Lane 1: A431 whole cell lysates Lane 2: F9 whole cell lysates Lane 3: PC12 whole cell lysates Lane 4: Mouse spleen lysates

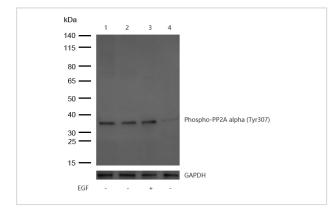
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution

Predicted band size: 35 kDa Observed band size: 35 kDa

Exposure time: 12 seconds



All lanes : PP2A alpha (Phospho-Tyr307) Rabbit mAb at 1/1k

dilution

Lane 1 : Rat Kidney lysates Lane 2 : Mouse Liver lysates

Lane 3: A431 treated with 100ng/ml EGF for 20min whole cell

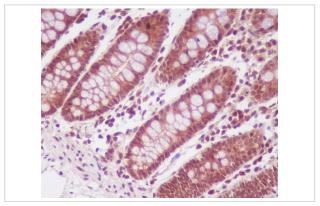
lysates

Lane 4 : A431 whole cell lysates Lysates/proteins at 20 µg per lane.

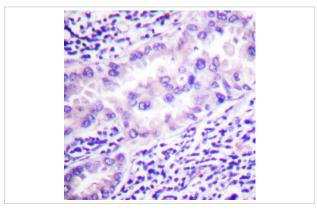
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution

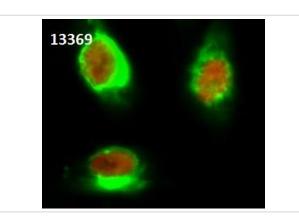
Predicted band size: 35 kDa Observed band size: 35 kDa Exposure time: 10 seconds



Formalin-fixed; paraffin-embedded human colon tissue stained for PP2A(Phospho-Y307) using 13369 at 1/100 dilution in immunohistochemical analysis.



Formalin-fixed; paraffin-embedded human lung carcinoma tissue stained for PP2A(Phospho-Y307) using 13369 at 1/100 dilution in immunohistochemical analysis.



Immunocytochemistry/Immunofluorescence PP2A(Phospho-Y307) antibody (13369) ICC/IF staining of PP2A(Phospho-Y307) in Hela cells. Cells were fixed with 4% Paraformaldehyde permeabilized with 0.1% Triton X-100.

Samples were incubated with 13369(red) at a working dilution of 1/100.HSP70 Monoclonal antibody (green) was diluted at 1:200.

Goat Anti Rabbit Alexa Fluor 647 was diluted at 1:1000. Goat Anti Mouse Alexa Fluor 488 was diluted at 1:1000.

## Background

Protein phosphatase type 2A (PP2A) is an essential protein serine/threonine phosphatase that is conserved in all eukaryotes. PP2A is a key enzyme within various signal transduction pathways as it regulates fundamental cellular activities such as DNA replication, transcription, translation, metabolism, cell cycle progression, cell division, apoptosis and development. The core enzyme consists of catalytic C and regulatory A (or PR65) subunits, with each subunit represented by  $\alpha$  and  $\beta$  isoforms. Additional regulatory subunits belong to four different families of unrelated proteins. Both the B (or PR55) and B' regulatory protein families contain  $\alpha$ ,  $\beta$ , γ and δ isoforms, with the B' family also including an ε protein. B" family proteins include PR72, PR130, PR59 and PR48 isoforms, while striatin (PR110) and SG2NA (PR93) are both members of the B''' regulatory protein family. These B subunits competitively bind to a shared binding site on the core A subunit. This variable array of holoenzyme components, particularly regulatory B subunits, allows PP2A to act in a diverse set of functions. PP2A function is regulated by expression, localization, holoenzyme composition and post-translational modification. Phosphorylation of PP2A at Tyr307 by Src occurs in response to EGF or insulin and results in a substantial reduction of PP2A activity. Reversible methylation on the carboxyl group of Leu309 of PP2A has been observed. Methylation alters the conformation of PP2A, as well as its localization and association with B regulatory subunits.

#### References

- 1. Inoue D et al. SETBP1 mutations drive leukemic transformation in ASXL1-mutated MDS. Leukemia 29:847-57 (2015).
- 2. Nardi F et al. Enhanced insulin sensitivity associated with provision of mono and polyunsaturated fatty acids in skeletal muscle cells involves counter modulation of PP2A. PLoS One 9:e92255 (2014).

### **Published Papers**

Lei Chen;Xia Zhao;Rui Sheng;Philip Lazarovici;Wenhua Zheng el at., Artemisinin alleviates astrocyte overactivation and neuroinflammation by modulating the IRE1/NF-kB signaling pathway in in vitro and in vivo Alzheimer's disease models., , (2025)

PMID:39826816

Note: This product is for in vitro research use only and is not intended for use in humans or animals.