

Rabbit Anti-phospho-PP2A alpha+beta (Tyr307) antibody

SL6419R

Product Name:	phospho-PP2A alpha+beta (Tyr307)
Chinese Name:	磷酸化蛋白磷酸酶2A(PP2Aα)抗体
Alias:	p-PP2A-Cα/β; PP2A alpha (phospho Y307); p-PP2A alpha(Y307); PP2A A; PP2A alpha; PP2A B; PP2A beta; PP2Ac; PP2C alpha; PP2C beta; PP2CA; PP2CB; PPP2CA; PPP2CB; Protein phosphatase 2 (formerly 2A) catalytic subunit alpha isoform; Protein phosphatase 2 (formerly 2A) catalytic subunit beta isoform; Protein phosphatase 2 catalytic subunit beta isoform; Protein phosphatase 2 catalytic subunit; Replication protein C; RP C; Serine/threonine protein phosphatase 2A catalytic subunit alpha isoform; Serine/threonine protein phosphatase 2A catalytic subunit alpha isoform; Serine/threonine protein phosphatase 2A catalytic subunit beta isoform; Serine/threonine protein phosphatase 2A catalytic subunit beta isoform; Serine/threonine protein phosphatase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow,
Applications:	WB=1:500-2000ELISA=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.
Molecular weight:	34kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human PPP2CA around the phosphorylation site of Tyr307:PD(p-Y)FL
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

Storage:

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.

PubMed:

PubMed

This gene encodes the phosphatase 2A catalytic subunit. Protein phosphatase 2A is one of the four major Ser/Thr phosphatases, and it is implicated in the negative control of cell growth and division. It consists of a common heteromeric core enzyme, which is composed of a catalytic subunit and a constant regulatory subunit, that associates with a variety of regulatory subunits. This gene encodes an alpha isoform of the catalytic subunit. [provided by RefSeq, Jul 2008].

Function:

PP2A can modulate the activity of phosphorylase B kinase casein kinase 2, mitogenstimulated S6 kinase, and MAP-2 kinase. Cooperates with SGOL2 to protect centromeric cohesin from separase-mediated cleavage in oocytes specifically during meiosis I (By similarity). Can dephosphorylate SV40 large T antigen and p53/TP53. Dephosphorylates SV40 large T antigen, preferentially on serine residues 120, 123, 677, and perhaps 679. The C subunit was most active, followed by the AC form, which was more active than the ABC form, and activity of all three forms was strongly stimulated by manganese, and to a lesser extent by magnesium. Dephosphorylation by the AC form, but not C or ABC form is inhibited by small T antigen. Activates RAF1 by dephosphorylating it at 'Ser-259'.

Product Detail:

Subunit:

PP2A consists of a common heterodimeric core enzyme, composed of PPP2CA a 36 kDa catalytic subunit (subunit C) and PPP2R1A a 65 kDa constant regulatory subunit (PR65 or subunit A), that associates with a variety of regulatory subunits. Proteins that associate with the core dimer include three families of regulatory subunits B (the R2/B/PR55/B55, R3/B"/PR72/PR130/PR59 and R5/B'/B56 families), the 48 kDa variable regulatory subunit, viral proteins, and cell signaling molecules. Interacts with NXN; the interaction is direct (By similarity). Interacts with TP53, SGOL1 and SGOL2. Interacts with AXIN1; the interaction dephosphorylates AXIN1. Interacts with PIM3; this interaction promotes dephosphorylation, ubiquitination and proteasomal degradation of PIM3. Interacts with RAF1.

Subcellular Location:

Cytoplasm. Nucleus. Chromosome, centromere. Cytoplasm, cytoskeleton, spindle pole. Note=In prometaphase cells, but not in anaphase cells, localizes at centromeres. During mitosis, also found at spindle poles. Centromeric localization requires the presence of SGOL2.

Post-translational modifications:

Reversibly methyl esterified on Leu-309. Carboxyl methylation may play a role in holoenzyme assembly, enhancing the affinity of the PP2A core enzyme for some, but not all, regulatory subunits. It varies during the cell cycle.

Phosphorylation of either threonine (by autophosphorylation-activated protein kinase) or tyrosine results in inactivation of the phosphatase. Auto-dephosphorylation has been suggested as a mechanism for reactivation.

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Similarity:

Belongs to the PPP phosphatase family. PP-1 subfamily.

SWISS: P67775

Gene ID: 5515

Database links:

Entrez Gene: 416318Chicken

Entrez Gene: 282320Cow

Entrez Gene: 5515Human

Entrez Gene: 19052 Mouse

Entrez Gene: 397656Pig

Entrez Gene: 100009252Rabbit

Entrez Gene: 24672Rat

Omim: 176915Human

SwissProt: P48463Chicken

SwissProt: P67774Cow

SwissProt: P67775Human

SwissProt: P63330Mouse

SwissProt: P67776Pig

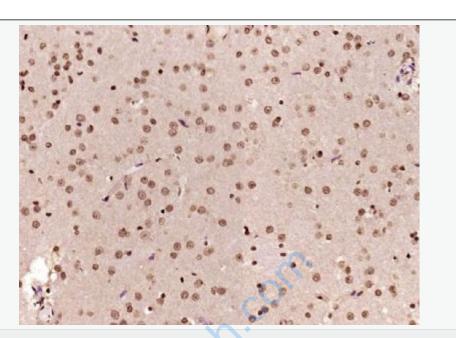
SwissProt: P67777Rabbit

SwissProt: P63331Rat

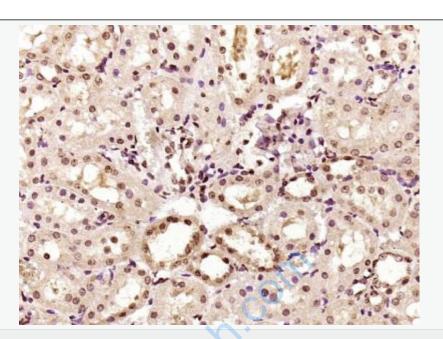
<u>Unigene: 105818</u>Human

Unigene: 260288Mouse

	Unigene: 1271Rat
	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	75— 63— 48— 35— — phospho-PP2A alpha+beta(Tyr307) 25— 20— 17— Sample:
	Hela(Human) Cell Lysate at 30 ug
	Primary: Anti-phospho-PP2A alpha+beta(Tyr307) (SL6419R) at 1/500 dilution
	Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 34 kD
	Observed band size: 34 kD



Paraformaldehyde-fixed, paraffin embedded (Rat 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 (phospho-PP2A alpha+beta(Tyr307)) Polyclonal Antibody, Unconjugated (SL6419R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat kidney); 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 (phospho-PP2A alpha+beta(Tyr307)) Polyclonal Antibody, Unconjugated (SL6419R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.