PP2A-Cα (Phospho Tyr307) Rabbit pAb

CatalogNo: YP0889 Orthogonal Validated Comparable Abs

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IP,IHC,IF,ELISA

MW
- 35kD (Observed)

Isotype
- IgG

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-1:2000
IHC 1:100-1:300
IF 1:200-1:1000
ELISA 1:5000
Not yet tested in other applications.

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human PP2A-alpha around the phosphorylation site of Tyr307. AA range:260-309

Specificity	Phospho-PP2A-Cα (Y307) Polyclonal Antibody detects endogenous levels of PP2A-Cα protein only when phosphorylated at Y307.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):PDyFL

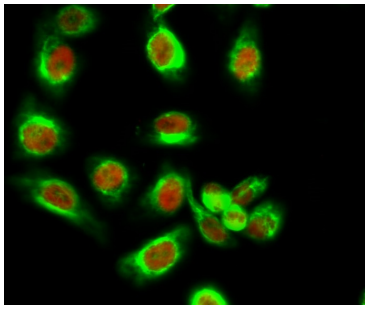
Target Information

Gene name	PPP2CA
Protein Name	Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform

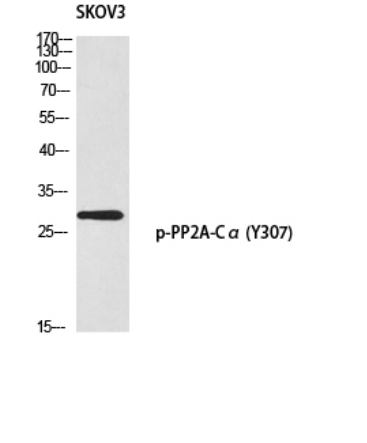
Organism	Gene ID	UniProt ID
Human	5515;	P67775;
Mouse	19052;	P63330;
Rat	24672;	P63331;

Cellular Localization	Cytoplasm . Nucleus . Chromosome, centromere . Cytoplasm, cytoskeleton, spindle pole . In prometaphase cells, but not in anaphase cells, localizes at centromeres (PubMed:16541025). During mitosis, also found at spindle poles (PubMed:16541025). Centromeric localization requires the presence of SGO2 (By similarity). .
Tissue specificity	Fibroblast,Liver,Lung,Placenta,Testis,Uterus,
Function	Catalytic activity:A phosphoprotein + H(2)O = a protein + phosphate.,cofactor:Binds 1 iron ion per subunit.,cofactor:Binds 1 manganese ion per subunit.,Function:PP2A can modulate the activity of phosphorylase B kinase casein kinase 2, mitogen-stimulated S6 kinase, and MAP-2 kinase. Can dephosphorylate SV40 large T antigen and p53. 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.,PTM: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.,PTM:Reversibly methyl esterified on Leu-309. Carboxyl methylation may play a role in holoenzyme assembly. It varies during the cell cycle.,similarity:Belongs to the PPP phosphatase family.,similarity:Belongs to the PPP phosphatase family. PP-1 subfamily.,subcellular location:In prometaphase cells, but not in anaphase cells, localizes at centromeres. During mitosis, also found at spindle poles.,subunit:PP2A consists of a common heterodimeric core enzyme, composed of a 36 kDa catalytic subunit (subunit C) and 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). May indirectly interact with SGOL1, most probably through regulatory B56 subunits.,

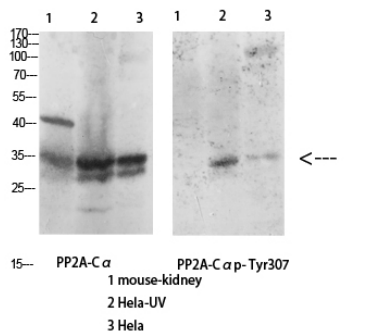
Validation Data



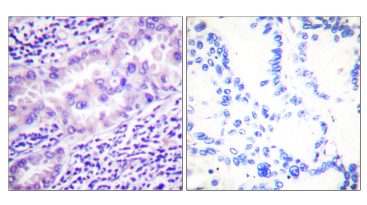
Immunofluorescence analysis of Hela cell. 1,mouse Tubulin Antibody YM3505 (green) was diluted at 1:200 (4℃ overnight). PP2A-Cα (Phospho Tyr307) Rabbit pAb (green) was diluted at 1:200 (4℃ overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000 (room temperature, 50min).



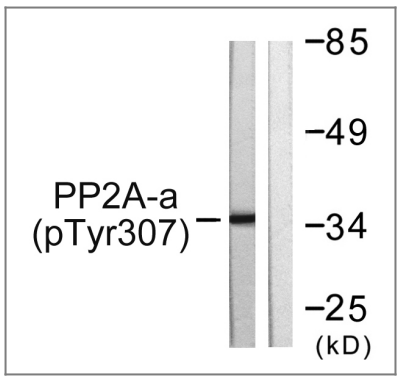
Western blot analysis of SKOV3 using p-PP2A-Cα (Y307) antibody. Antibody was diluted at 1:1000



Western Blot analysis of various cells using Antibody diluted at 1:1000. Secondary antibody (catalog#:RS0002) was diluted at 1:20000



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using PP2A-alpha (Phospho-Tyr307) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from A549 cells, using PP2A-alpha (Phospho-Tyr307) Antibody. The lane on the right is blocked with the phospho peptide.

Contact information

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Please scan the QR code to access additional product information:
PP2A-Cα (Phospho Tyr307) Rabbit pAb