

Product Name: PP2A-C α (phospho Tyr307) Rabbit Polyclonal Antibody**Catalog #: APRab05295**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
Molecular Weight	35kDa

Antigen Information

Gene Name	PPP2CA
Alternative Names	PPP2CA; Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform; PP2A-alpha; Replication protein C; RP-C
Gene ID	5515.0
SwissProt ID	P67775
Immunogen	The antiserum was produced against synthesized peptide derived from human PP2A-alpha around the phosphorylation site of Tyr307. AA range:260-309

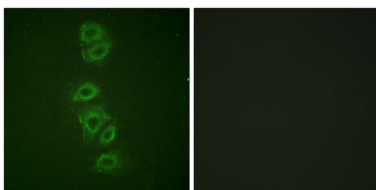
Background

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],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.,

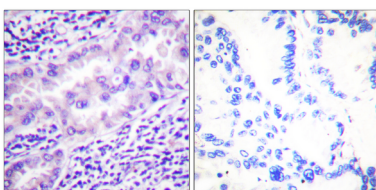
Research Area

Oocyte meiosis;WNT;WNT-T CELLTGF-beta;Tight junction;Long-term depression;

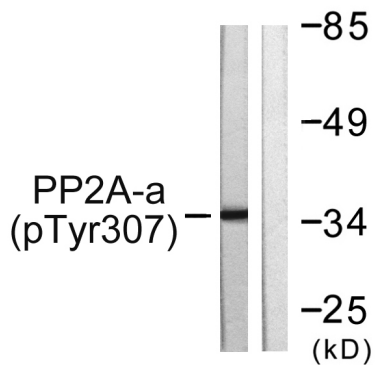
Image Data



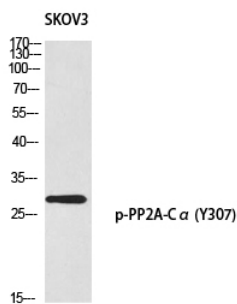
Immunofluorescence analysis of A549 cells, using PP2A-alpha (Phospho-Tyr307) Antibody. The picture on the right is blocked with the phospho peptide.



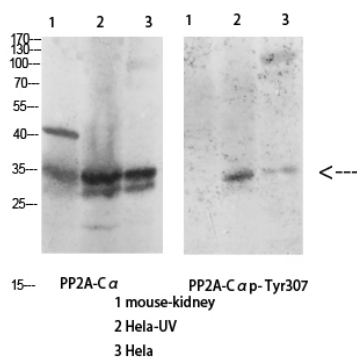
Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using PP2A-alpha (Phospho-Tyr307) Antibody. The picture on the right is blocked with the phospho peptide.



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.



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 was diluted at 1:20000