

Summary

Production Name	PP2A-C α Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

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.The antiserum was produced against synthesized peptide derived from human PP2A-alpha. AA range:260-309

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.
Molecular Weight	35kD

Background

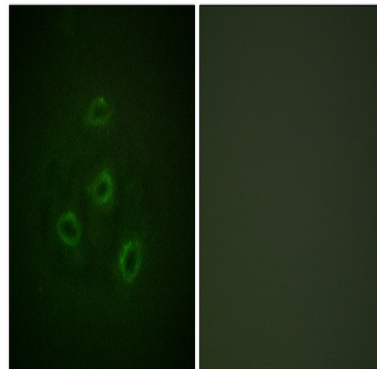
This gene encodes the phosphatase 2A catalytic subunit. Protein phosphatase 2A is one of the four major Ser/Thr phosphatases, and it is implicated in the negative control of cell growth and division. It consists of a common heteromeric core enzyme, which is composed of a catalytic subunit and a constant 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 + H₂O = 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

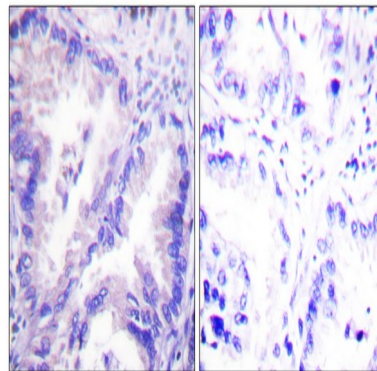
Oocyte meiosis; WNT; WNT-T CELLTGF-beta; Tight junction; Long-term depression;

Image Data

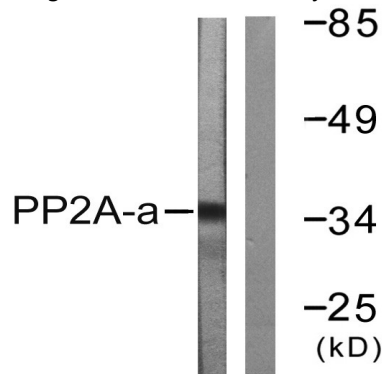
Product Name: PP2A-C α Rabbit Polyclonal Antibody
Catalog #: APRab16396



Immunofluorescence analysis of HepG2 cells, using PP2A-alpha Antibody. The picture on the right is blocked with the synthesized peptide.

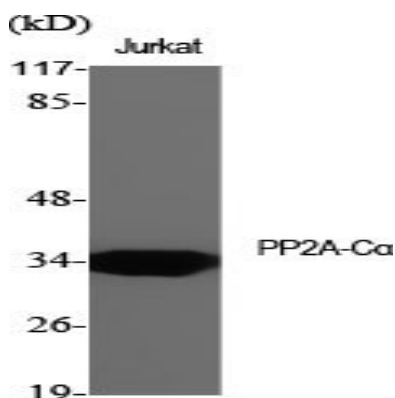


Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using PP2A-alpha Antibody. The picture on the right is blocked with the synthesized peptide.

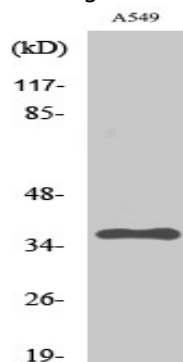


Western blot analysis of lysates from A549 cells, using PP2A-alpha Antibody. The lane on the right is blocked with the synthesized peptide.

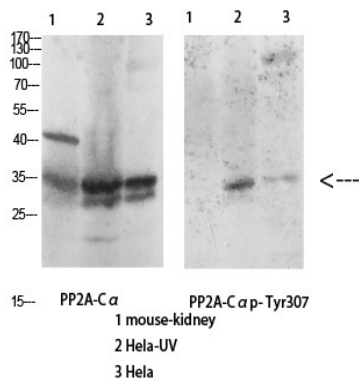
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Western Blot analysis of various cells using PP2A-C α Polyclonal Antibody diluted at 1 : 2000



Western Blot analysis of A549 cells using PP2A-C α Polyclonal Antibody diluted at 1 : 2000



Western Blot analysis of various cells using Antibody diluted at 1:1000. Secondary antibody was diluted at 1:20000

Note

For research use only.