



Rabbit Anti-PPP4C antibody

SL0490R

Product Name:	PPP4C
Chinese Name:	磷酸酯酶-2Ac抗体
Alias:	protein phosphatase 4/c; PP4/C; Ser/Thr-protein phosphatase 4 catalytic subunit; serine/threonine-protein phosphatase 4 catalytic subunit isoform X2; PP4C; PP4; PP X; PP-X; PP2AC; PPP4C; PP4; PP4C; PPH3; PPP4; PPX; PP2Ac; PP4C; PP4C_HUMAN; protein phosphatase 4 (formerly X), catalytic subunit; Protein phosphatase 4 catalytic subunit; Protein phosphatase X; protein phosphatase X, catalytic subunit; Serine/threonine protein phosphatase 4 catalytic subunit; Serine/threonine-protein phosphatase-4 catalytic subunit.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Rabbit,
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:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PP4C:265-307/307
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
Product Detail:	Protein phosphatase 4C consists of a catalytic subunit PPP4C and a regulatory subunit.

PPP4R1 and belongs to the PPP phosphatase family, PP X subfamily. Protein phosphatases are involved in determining the phosphorylation state of many regulatory proteins. PPP4C is involved in many processes such as microtubule organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, tumor necrosis factor (TNF)-alpha signaling, activation of c-Jun N-terminal kinase MAPK8, regulation of histone acetylation, DNA damage checkpoint signaling, NF-kappa-B activation and cell migration. The PPP4C-PPP4R1 PP4 complex may play a role in dephosphorylation and regulation of HDAC3. The PPP4C-PPP4R2-PPP4R3A PP4 complex specifically dephosphorylates H2AFX phosphorylated on Ser-140 (gamma-H2AFX) generated during DNA replication and required for DNA DSB repair. Dephosphorylates NDEL1 at CDK1 phosphorylation sites and negatively regulates CDK1 activity in interphase.

Function:

Protein phosphatase that is involved in many processes such as microtubule organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, DNA repair, tumor necrosis factor (TNF)-alpha signaling, activation of c-Jun N-terminal kinase MAPK8, regulation of histone acetylation, DNA damage checkpoint signaling, NF-kappa-B activation and cell migration. The PPP4C-PPP4R1 PP4 complex may play a role in dephosphorylation and regulation of HDAC3. The PPP4C-PPP4R2-PPP4R3A PP4 complex specifically dephosphorylates H2AFX phosphorylated on Ser-140 (gamma-H2AFX) generated during DNA replication and required for DNA double strand break repair. Dephosphorylates NDEL1 at CDK1 phosphorylation sites and negatively regulates CDK1 activity in interphase. In response to DNA damage, catalyzes RPA2 dephosphorylation, an essential step for DNA repair since it allows the efficient RPA2-mediated recruitment of RAD51 to chromatin.

Subunit:

Serine/threonine-protein phosphatase 4 (PP4) occurs in different assemblies of the catalytic and one or more regulatory subunits. Component of the PP4 complexes PPP4C-PPP4R1, PPP4C-PPP4R2, PPP4C-PPP4R2-PPP4R3A, PPP4C-PPP4R2-PPP4R3B and PPP4C-PPP4R4. The PPP4C-PPP4R2 complex appears to be a tetramer composed of 2 molecules of PPP4C and 2 molecules of PPP4R2. Interacts with REL, NFKB1/p50 and RELA. Interacts with SMN1 AND GEMIN4. Interacts with IRS4 (phosphorylated). Interacts with SMEK1/PPP4R3A; the interaction requires PP4R2. Interacts with HDAC3.

Subcellular Location:

Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome.

Similarity:

Belongs to the PPP phosphatase family. PP-4 (PP-X) subfamily.

SWISS:

P60510

Gene ID:
5531

Database links:

[Entrez Gene: 5531](#) Human

[Entrez Gene: 56420](#) Mouse

[Entrez Gene: 100009163](#) Rabbit

[Entrez Gene: 171366](#) Rat

[Omim: 602035](#) Human

[SwissProt: P60510](#) Human

[SwissProt: P97470](#) Mouse

[SwissProt: P11084](#) Rabbit

[SwissProt: Q5BJ92](#) Rat

[Unigene: 534338](#) Human

[Unigene: 41998](#) Mouse

[Unigene: 9173](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

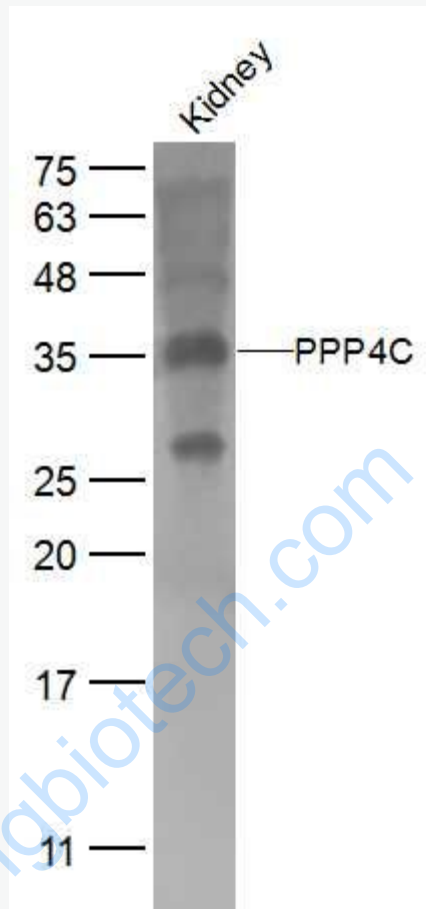
Kinases and Phosphatases (Kinases and Phosphatases)

蛋白磷酸酶-4(又称PP4或PPX)是蛋白磷酸酶2A(PP2A)家族的重要成员之一;

PP-

2Ac参与细胞周期,生长和分化及多细胞信号通路的调节,也用于Tumour方面的研究。

Picture:



Sample:

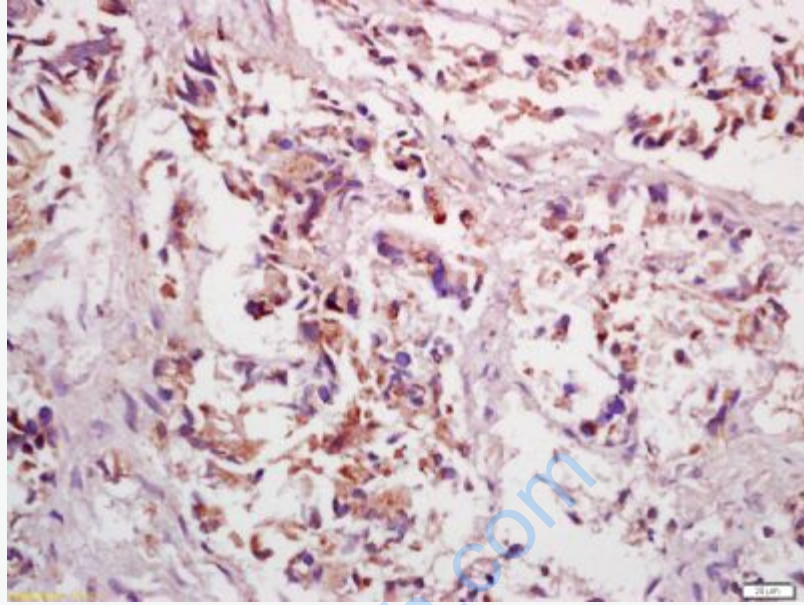
Kidney (Mouse) Lysate at 40 ug

Primary: Anti-PPP4C (SL0490R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 34 kD

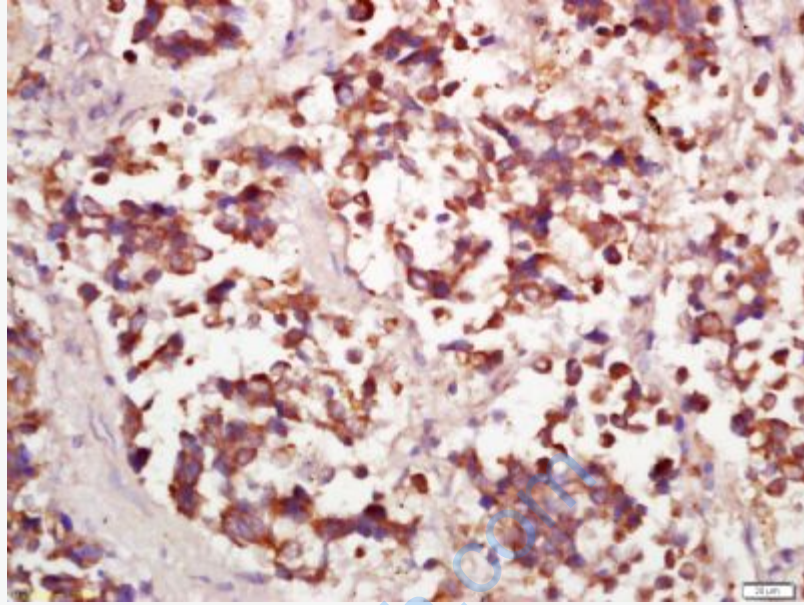
Observed band size: 34 kD



Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-PPP4C Polyclonal Antibody, Unconjugated(SL0490R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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