SunLong Biotech Co.,LTD
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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 catalitic subunit; serine/threonine phosphatase 4 catalytic subunit isoform X2; PP4C; PP4; PP X; PP-X; PP2AC; PPP4C; PP4; PP4; PPP4; PPX; PP2Ac; PP4C; PP4C_HUMAN; protein phosphatase 4 (formerly X), catalytic subun phosphatase 4 catalytic subunit; Protein phosphatase X; protein phosphatase X, catalytic subunit Serine/threonine protein phosphatase 4 catalytic subunit; Serine/threonine-protein phosphatase-4 subunit.
Research Area	Cell biology Neurobiology Signal transduction Apoptosis Kinases and Phosphatases
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse (predicted:Rat,Chicken,Dog,Rabbit)
Applications	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,Flow-C （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	34kDa
Cellular localization	The nucleus cytoplasmic
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human PPP4C: 265-307/307
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

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

PubMed PubMed

Protein phosphatase 4C consists of a catalytic subunit PPP4C and a regulatory subunit. PPP4R1 to the PPP phosphatase family, PP X subfamily. Protein phosphatases are involved in determinir phosphorylation state of many regulatory proteins. PPP4C is involved in many processes such as organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, tumor necrosis fact (TNF)-alpha signaling, activation of c-Jun N-terminal kinase MAPK8, regulation of histone acety damage checkpoint signaling, NF-kappa-B activation and cell migration. The PPP4C-PPP4R1 P may play a role in dephosphorylation and regulation of HDAC3. The PPP4C-PPP4R2-PPP4R3A complex specifically dephosphorylates H2AFX phosphorylated on Ser-140 (gamma-H2AFX) ge during DNA replication and required for DNA DSB repair. Dephosphorylates NDEL1 at CDK1 phosphorylation sites and negatively regulates CDK1 activity in interphase.

Product Detail

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

Subunit:
Serine/threonine-protein phosphatase 4 (PP4) occurs in different assemblies of the catalytic and regulatory subunits. Component of the PP4 complexes PPP4C-PPP4R1, PPP4C-PPP4R2, PPP4C-PPP4R2-PPP4R3A, PPP4C-PPP4R2-PPP4R3B and PPP4C-PPP4R4. The PPP4C-PPP4 appears to be a tetramer composed of 2 molecules of PPP4C and 2 molecules of PPP4R2. Interac NFKB1/p50 and RELA. Interacts with SMN1 AND GEMIN4. Interacts with IRS4 (phosphorylat 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

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。

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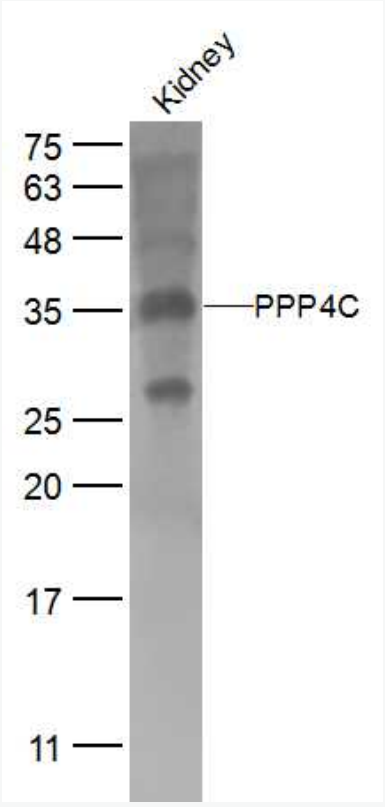
Product Picture



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

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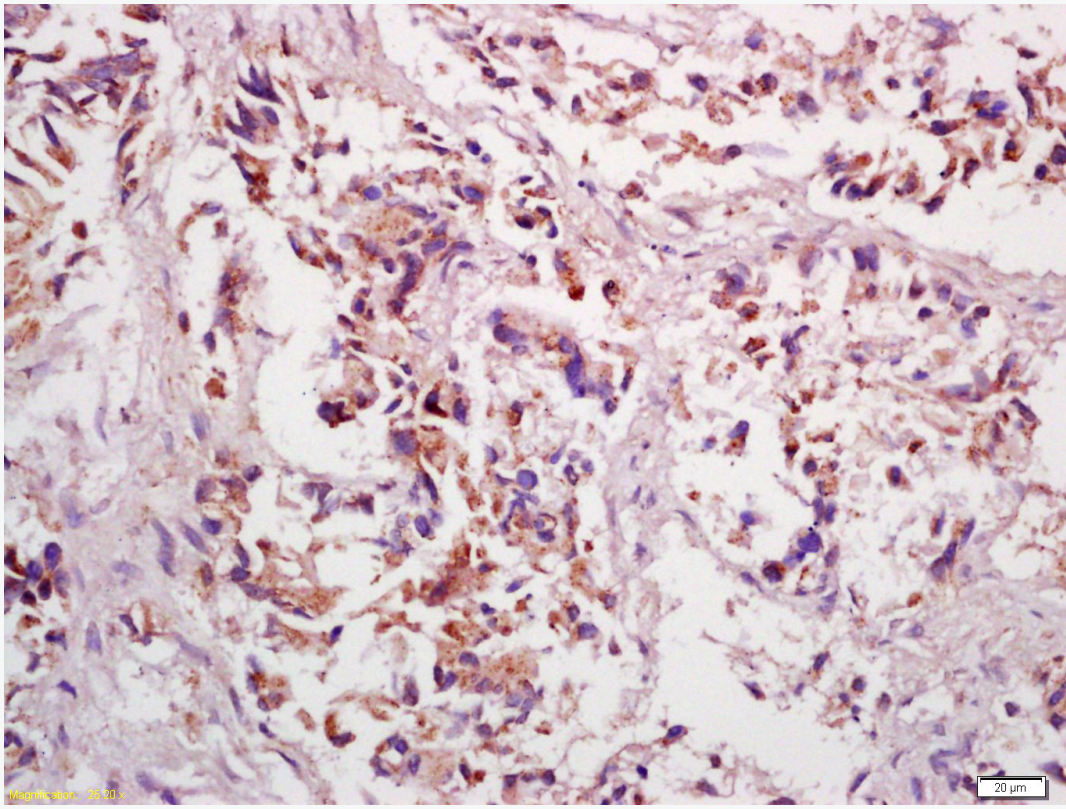

Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous

by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ fo

Incubation: Anti-PPP4C Polyclonal Antibody, Unconjugated(SL0490R) 1:200, overnight at 4

followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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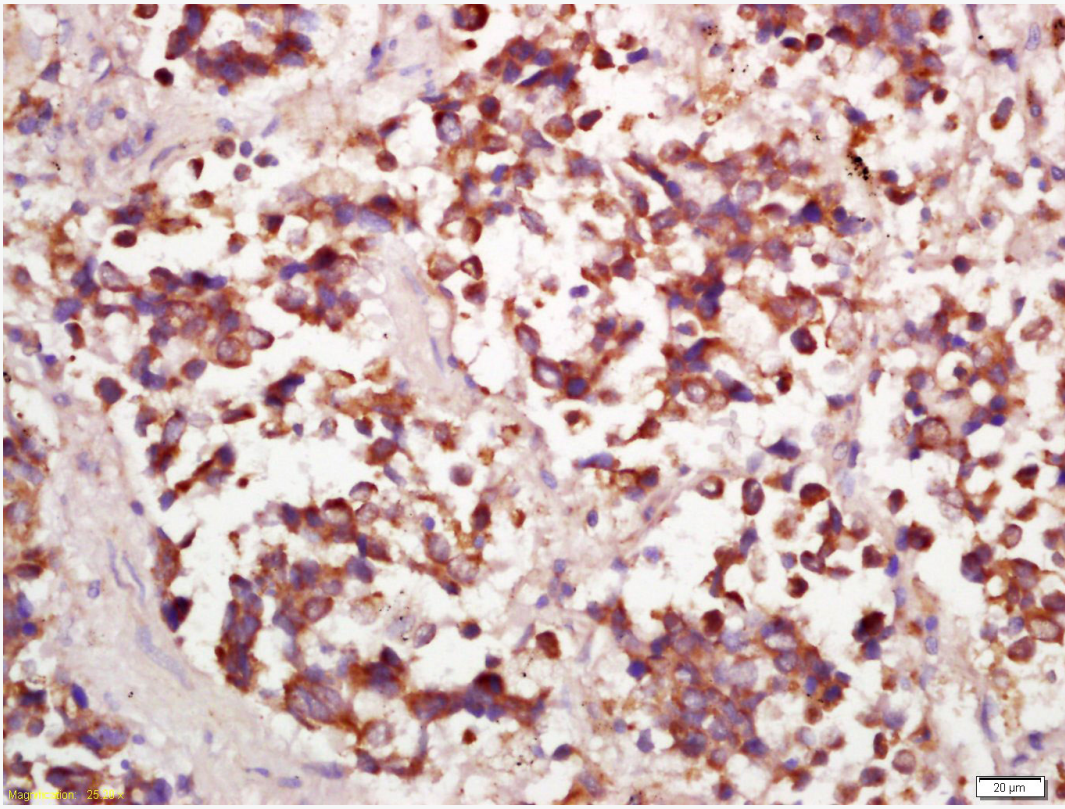

Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous

by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ fo

Incubation: Anti-PPP4C Polyclonal Antibody, Unconjugated(SL0490R) 1:200, overnight at 4

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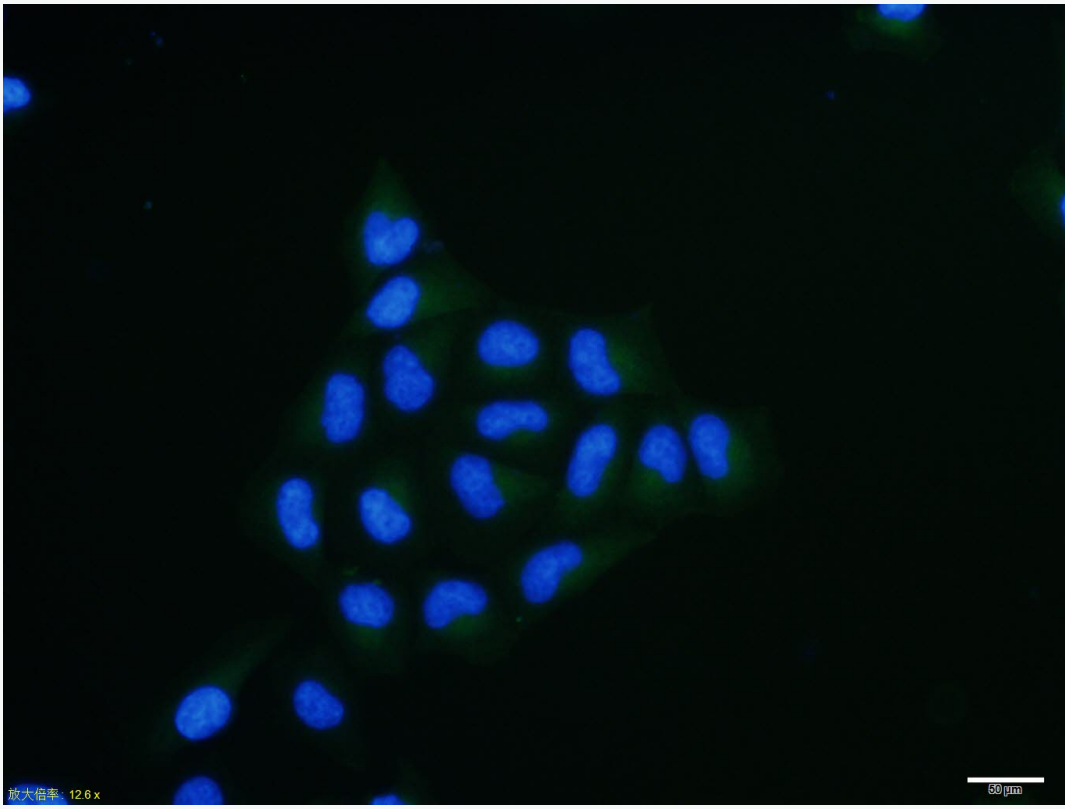
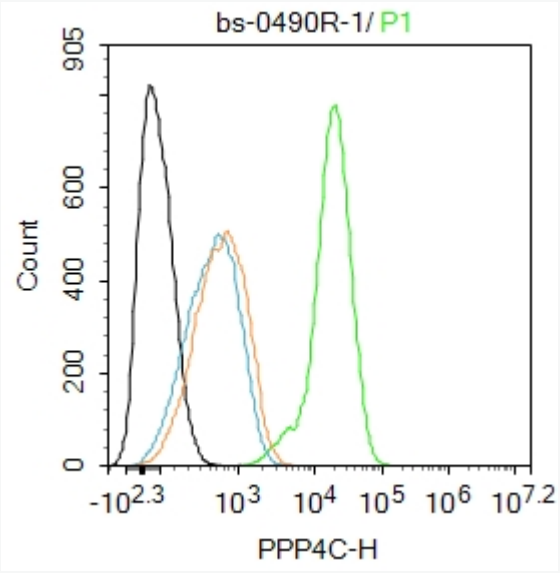


Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blockin
(normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (PPP4C) polyclon
Antibody, Unconjugated (SL0490R) 1:100, 90 minutes at 37°C; followed by a conjugated Go
Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain
nuclei.



Blank control: HepG2.

Primary Antibody (green line): Rabbit Anti-PPP4C antibody (SL0490R)

Dilution: 1ug/Test;

Secondary Antibody : Goat anti-rabbit IgG-FITC

Dilution: 0.5ug/Test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90

methanol for 20 min at -20℃.The cells were then incubated in 5%BSA to block non-specific

protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibo

min at room temperature. The secondary antibody used for 40 min at room temperature. Acqu

20,000 events was performed.

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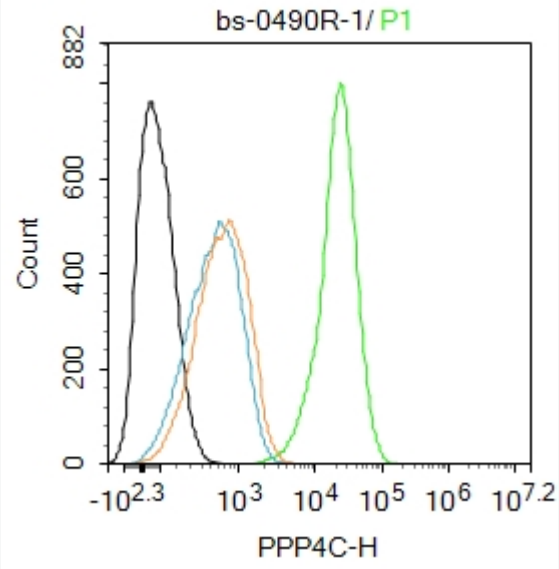

Blank control: HepG2.

Primary Antibody (green line): Rabbit Anti-PPP4C antibody (SL0490R)

Dilution: 1ug/Test;

Secondary Antibody : Goat anti-rabbit IgG-FITC

Dilution: 0.5ug/Test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90

methanol for 20 min at -20℃.The cells were then incubated in 5%BSA to block non-specific

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