



Rabbit Anti-PAP2B antibody

SL4127R

Product Name:	PAP2B
Chinese Name:	磷脂酸磷酸酶2b抗体
Alias:	Dri42; Lipid phosphate phosphohydrolase 3; LPP3; PAP 2b; PAP2 beta; PAP2b; Vascular endothelial growth factor and type I collagen inducible protein; VCIP.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Dog,Pig,Cow,Horse,
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:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PAP2B:241-311/311
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:	Phosphatidic acid phosphatase type 2b (PPAP2b) is a member of the phosphatidic acid phosphatase (PAP) family that function in de novo synthesis of glycerolipids as well as in receptor activated signal transduction mediated by phospholipase D. PAP2b catalyzes the conversion of phosphatidic acid to diacylglycerol and hydrolyzes lysophosphatidic acid, ceramide-1-phosphate and sphingosine-1-phosphate. It is a homodimer glycoprotein localized at the cell plasma membrane. Expression promotes adhesion,

spreading, and tyrosine phosphorylation of Fak, Shc, Cas and paxillin in endothelial cells. PAP2b induced cell-cell interactions regulate specific intracellular signaling pathways that involve p120-catenin, Fak, Akt, and GSK3 β protein kinases.

Function:

Catalyzes the conversion of phosphatidic acid (PA) to diacylglycerol (DG). In addition it hydrolyzes lysophosphatidic acid (LPA), ceramide-1-phosphate (C-1-P) and sphingosine-1-phosphate (S-1-P). The relative catalytic efficiency is LPA = PA > C-1-P > S-1-P. May be involved in cell adhesion and in cell-cell interactions.

Subunit:

Homodimer. This complex seems not to be involved in substrate recognition, it may confer only structural or functional stability.

Subcellular Location:

Golgi apparatus, trans-Golgi network membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein.

Tissue Specificity:

Ubiquitously expressed. Highly expressed in heart and placenta.

Post-translational modifications:

N-glycosylated. Contains high-mannose oligosaccharides.

Similarity:

Belongs to the PA-phosphatase related phosphoesterase family.

SWISS:

O14495

Gene ID:

8613

Database links:

[Entrez Gene: 8613](#)Human

[Entrez Gene: 67916](#)Mouse

[Entrez Gene: 192270](#)Rat

[Omim: 607125](#)Human

[SwissProt: O14495](#)Human

[SwissProt: Q99JY8](#)Mouse

[SwissProt: P97544](#)Rat

[Unigene: 405156](#)Human

[Unigene: 619002](#)Human

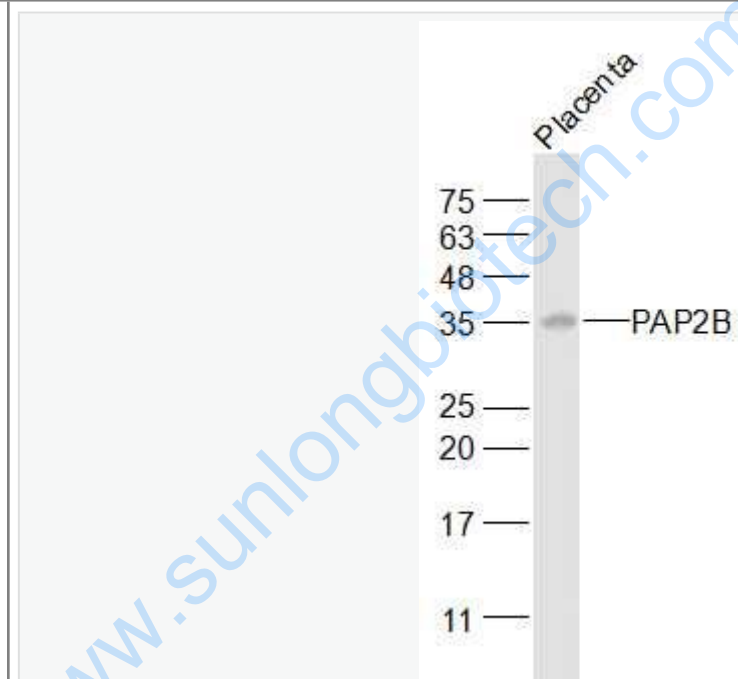
[Unigene: 348326](#)Mouse

[Unigene: 12038](#)Rat

Important Note:

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

Picture:



Sample:

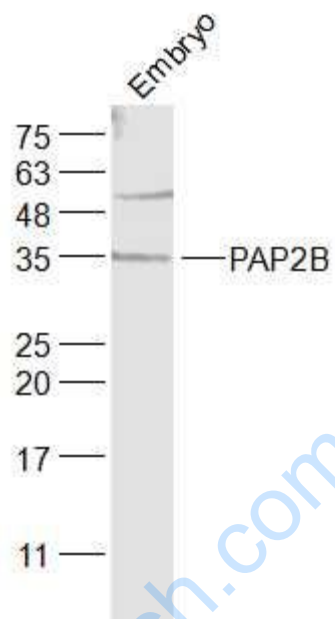
Placenta (Mouse) Lysate at 40 ug

Primary: Anti-PAP2B (SL4127R) at 1/1000 dilution

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

Predicted band size: 34 kD

Observed band size: 35 kD



Sample:

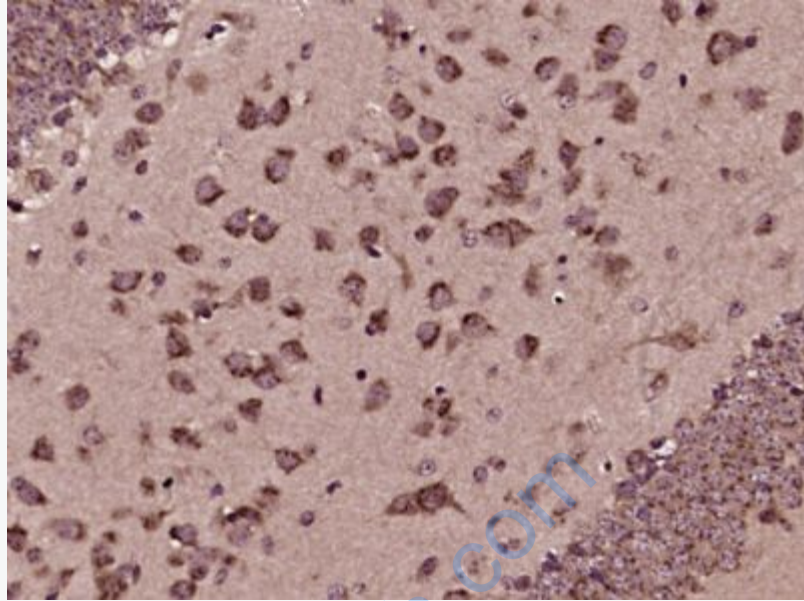
Embryo (Mouse) Lysate at 40 μ g

Primary: Anti-PAP2B (SL4127R) at 1/1000 dilution

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

Predicted band size: 34 kD

Observed band size: 35 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PAP2B) Polyclonal Antibody, Unconjugated (SL4127R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.