

Rabbit Anti-PPAP2A/Cy5 Conjugated antibody

SL5423R-Cy5

Product Name	Anti-PPAP2A/Cy5
Chinese Name	Cy5 标记的磷酸脂磷酸水解酶 1 抗体
Alias	Lipid phosphate phosphohydrolase 1; Lipid phosphate phosphohydrolase 1a; LLP1a; LPP1; LPP1_HUMAN; PAP 2a; PAP-2a; PAP2; PAP2-alpha; PAP2a; PAP2a2; PAP2alpha2; PAPalpha1; Phosphatidate phosphohydrolase type 2a; Phosphatidic acid phosphatase 2a; Phosphatidic acid phosphatase type 2A; Phosphatidic acid phosphohydrolase type 2a; PPAP2A; Type 2 phosphatidic acid phosphatase alpha; Type 2 phosphatidic acid phosphohydrolase.
Research Area	Tumour Cell biology immunology Signal transduction Lipoprotein The new supersedes the old
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Rat(predicted:Human,Mouse,Dog,Cow,Horse,Rabbit,Sheep) Flow-Cyt=3µg/Test
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	32kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human PPAP2A
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Storage	

background:

PPAP2A is a member of the phosphatidic acid phosphatase (PAP) family. PAPs convert phosphatidic acid to diacylglycerol, and function in de novo synthesis of glycerolipids as well as in receptor-activated signal transduction mediated by phospholipase D. This protein is an integral membrane glycoprotein, and has been shown to be a surface enzyme that plays an active role in the hydrolysis and uptake of lipids from extracellular space.

Function:

Broad-specificity phosphohydrolase that dephosphorylates exogenous bioactive glycerolipids and sphingolipids. Catalyzes the conversion of phosphatidic acid (PA) to diacylglycerol (DG). Pivotal regulator of lysophosphatidic acid (LPA) signaling in the cardiovascular system. Major enzyme responsible of dephosphorylating LPA in platelets, which terminates signaling actions of LPA. May control circulating, and possibly also regulate localized, LPA levels resulting from platelet activation. It has little activity towards ceramide-1-phosphate (C-1-P) and sphingosine-1-phosphate (S-1-P). The relative catalytic efficiency is LPA > PA > S-1-P > C-1-P. It's down-regulation may contribute to the development of colon adenocarcinoma.

Product Detail

Subunit:

Homodimer.

Subcellular Location:

Cell membrane; Multi-pass membrane protein.

Tissue Specificity:

Ubiquitously expressed with highest expression found in prostate. Isoform 1 is predominant in kidney, lung, placenta and liver. Isoform 2 is predominant in heart and pancreas. Found to be down-regulated in colon adenocarcinomas.

Post-translational modifications:

N-glycosylated. Contains high-mannose oligosaccharides.

Similarity:

Belongs to the PA-phosphatase related phosphoesterase family.

Database links:

[Entrez Gene: 8611](#) Human

[Omim: 607124](#) Human



[SwissProt: O14494](#) Human

[Unigene: 696231](#) Human

Important Note:

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