SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-ENPP2 antibody

Catalog Number: SL6279R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	ENPP2
Immunogen:	KLH conjugated synthetic peptide derived from human ENPP2: 131-230/863
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 Flow-Cyt=1ug/Test （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human,Mouse(predicted:Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit)
Predicted MW.:	95kDa
Subcellular Location:	Secretory protein
Background:	Hydrolyzes lysophospholipids to produce lysophosphatidic acid (LPA) in extracellular fluids. Major substrate is lysophosphatidylcholine. Also can act on sphingosylphosphphorylcholine producing sphingosine-1-phosphate, a modulator of cell motility. Can hydrolyze, in vitro, bis-pNPP, to some extent pNP-TMP, and barely ATP. Involved in several motility-related processes such as angiogenesis and neurite outgrowth. Acts as an angiogenic factor by stimulating migration of smooth muscle cells and microtubule formation. Stimulates migration of melanoma cells, probably via a pertussis toxin-sensitive G protein. May have a role in induction of parturition. Possible involvement in cell proliferation and adipose tissue development. Tumor cell motility-stimulating factor. **Function:** Hydrolyzes lysophospholipids to produce lysophosphatidic acid

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	(LPA) in extracellular fluids. Major substrate is lysophosphatidylcholine. Also can act on sphingosylphosphphorylcholine producing sphingosine-1-phosphate, a modulator of cell motility. Can hydrolyze, in vitro, bis-pNPP, to some extent pNP-TMP, and barely ATP. Involved in several motility-related processes such as angiogenesis and neurite outgrowth. Acts as an angiogenic factor by stimulating migration of smooth muscle cells and microtubule formation. Stimulates migration of melanoma cells, probably via a pertussis toxin-sensitive G protein. May have a role in induction of parturition. Possible involvement in cell proliferation and adipose tissue development. Tumor cell motility-stimulating factor. **Subcellular Location:** Secreted. Note=Secreted by most body fluids including serum and CSF. Also by adipocytes and numerous cancer cells. **Tissue Specificity:** Predominantly expressed in brain, placenta, ovary, and small intestine. Expressed in a number of carcinomas such as hepatocellular and prostate carcinoma, neuroblastoma and non-small-cell lung cancer. Expressed in body fluids such as plasma, cerebral spinal fluid (CSF), saliva, follicular and amniotic fluids. Not detected in leukocytes. Isoform 1 is more highly Eexpressed in peripheral tissues than in the central nervous system (CNS). Adipocytes only express isoform 1. Isoform 3 is more highly expressed in the brain than in peripheral tissues. **Post-translational modifications:** N-glycosylation, but not furin-cleavage, plays a critical role on secretion and on lysoPLD activity (By similarity). It has been suggested that the active SMB domain may be permitted considerable disulfide bond heterogeneity or variability, thus two alternate disulfide patterns based on 3D structures are described with 1 disulfide bond conserved in both. **Similarity:** Belongs to the nucleotide pyrophosphatase/phosphodiesterase family. Contains 2 SMB (somatomedin-B) domains. **Database links:** **Entrez Gene:** 5168 Human **Entrez Gene:** 18606 Mouse **Entrez Gene:** 84050 Rat Omim: 601060 Human **SwissProt:** Q13822 Human **SwissProt:** Q9R1E6 Mouse **SwissProt:** Q64610 Rat **Unigene:** 190977 Human **Unigene:** 250256 Mouse **Unigene:** 20403 Rat

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[VALIDATION IMAGES]

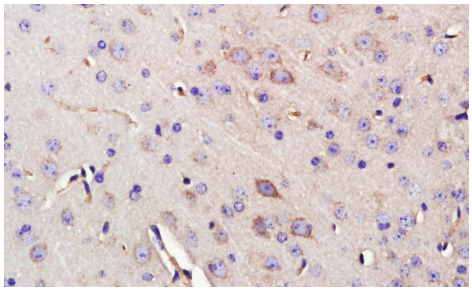


Figure 1. Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ENPP2) Polyclonal Antibody, Unconjugated (SL6279R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining

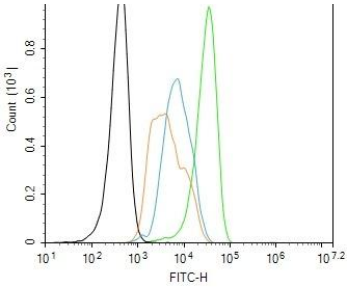


Figure 2. Blank control (black line) :Hela. Primary Antibody (green line): Rabbit Anti-ENPP2 antibody (SL6279R) Dilution:1ug/Test; Secondary Antibody (white blue line) : Goat anti-rabbit IgG-FITC Dilution: 0.5ug/Test. Isotype control (orange line) : Normal Rabbit IgG Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, 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 Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed

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