



Rabbit Anti-ENPP1 antibody

SL1760R

Product Name:	ENPP1
Chinese Name:	核苷酸内焦磷酸酶/磷酸二酯酶1抗体
Alias:	Alkaline phosphodiesterase 1; ARHR2; E-NPP 1; Ectonucleotide pyrophosphatase/phosphodiesterase 1; Ectonucleotide pyrophosphatase/phosphodiesterase family member 1; ENPP1_HUMAN; Ly 41 antigen; M6S1; Membrane component chromosome 6 surface marker 1; NPP1; NPPase; NPPS; Nucleotide pyrophosphatase; PC-1; PCA1; PDNP1; Phosphodiesterase I/nucleotide pyrophosphatase 1; Plasma cell membrane glycoprotein 1; Plasma-cell membrane glycoprotein PC-1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,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:	100kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ENPP1:251-350/925<Extracellular>
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:

ENPP1 has a broad specificity and cleaves a variety of substrates, including phosphodiester bonds of nucleotides and nucleotide sugars and pyrophosphate bonds of nucleotides and nucleotide sugars. It can hydrolyze nucleoside 5' triphosphates such as ATP, GTP, CTP, TTP and UTP to their corresponding monophosphates with release of pyrophosphate. It can also hydrolyze diadenosine polyphosphates and 3',5'-cAMP to AMP. It may play a role in the regulation of pyrophosphate production, the regulation of the availability of nucleotide sugars in the endoplasmic reticulum and Golgi, and the regulation of purinergic signaling.

The subtilisin-like Prohormone Convertase (PC) family is a group of cellular enzymes that cleave most prohormones and neuropeptide precursors. Numerous other cellular proteins, some viral proteins, and bacterial toxins that are transported by the constitutive secretory pathway are also targeted for maturation by PCs. PC family members share structural similarities, which include a heterogeneous ~10 kDa amino-terminal proregion, a highly conserved ~55 kDa subtilisin-like catalytic domain, and carboxyl-terminal domain that is heterogeneous in length and sequence. These enzymes become catalytically active following proregion cleavage within the appropriate cellular compartment. The subcellular localization of PC family members varies.

Immunolocalization studies show that PC1 is found in the perinuclear region as well as the trans-Golgi network, whereas PC2 can be found in the trans-Golgi network as well as diffusely distributed in the peripheral cytoplasm.

Function:

Involved in the processing of hormone and other protein precursors at sites comprised of pairs of basic amino acid residues. Substrates include POMC, renin, enkephalin, dynorphin, somatostatin and insulin.

Subunit:

Homodimer; disulfide-linked.

Subcellular Location:

Cytoplasmic

Tissue Specificity:

Expressed in plasma cells and also in a number of non-lymphoid tissues, including the distal convoluted tubule of the kidney, chondrocytes and epididymis.

DISEASE:

Defects in PCSK1 are the cause of proprotein convertase 1 deficiency (PC1 deficiency) [MIM:600955]. PC1 deficiency is characterized by obesity, hypogonadism, hypoadrenalism, reactive hypoglycemia as well as marked small-intestinal absorptive dysfunction. It is due to impaired processing of prohormones.

Similarity:

Belongs to the peptidase S8 family. Furin subfamily.

SWISS:

P22413

Gene ID:

5167

Database links:

[Entrez Gene: 5167](#)Human

[Entrez Gene: 18605](#)Mouse

[Entrez Gene: 85496](#)Rat

[Omim: 173335](#)Human

[SwissProt: P22413](#)Human

[SwissProt: P06802](#)Mouse

[SwissProt: Q924C3](#)Rat

[Unigene: 527295](#)Human

[Unigene: 27254](#)Mouse

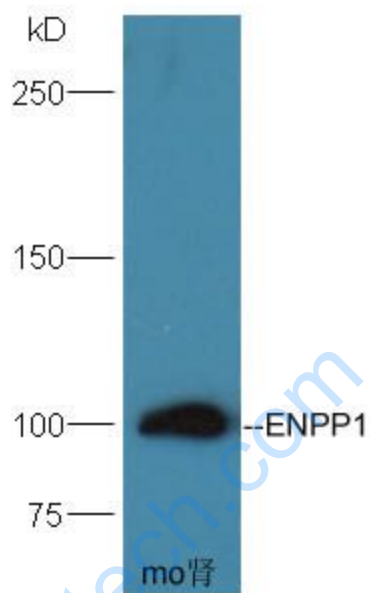
[Unigene: 1199](#)Rat

Important Note:

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

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Picture:



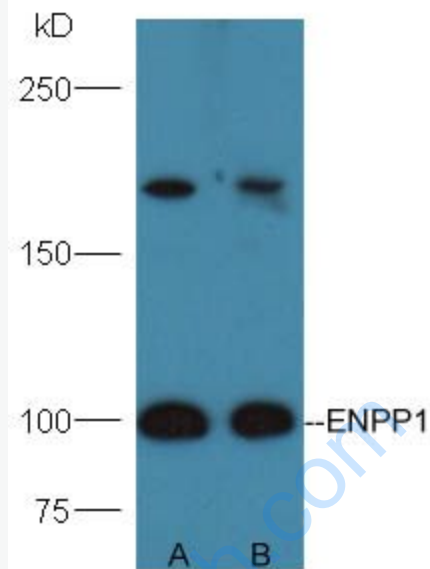
Sample: Kidney (Mouse) lysate at 30ug;

Primary: Anti-ENPP1 (SL1760R) at 1:300 dilution;

Secondary: HRP conjugated Goat-Anti-Rabbit IgG(bse-0295G-HRP) at 1: 5000 dilution;

Predicted band size :100 kD

Observed band size : 100 kD



Sample: Lane A: Testis (Mouse) lysate at 30ug; Lane B: Pancreas (Mouse) lysates at 30ug;

Primary: Anti-ENPP1 (SL1760R) at 1:300 dilution;

Secondary: HRP conjugated Goat-Anti-Rabbit IgG (bse-0295G-HRP) at 1: 5000 dilution;

Predicted band size : 100 kD

Observed band size : 100 kD