



ENPP1 Polyclonal Antibody

Catalog No	YP-Ab-07821
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	ENPP1 M6S1 NPPS PC1 PDNP1
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	ENPP1 Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Alkaline phosphodiesterase I;E NPP 1;Ectonucleotide;ENPP1;ENPP1 M6S1 NPPS PC1 PDNP1;Ectonucleotide pyrophosphatase/phosphodiesterase family member 1 (E-NPP 1) (Membrane component chromosome 6 surface marker 1) (Phosphodiesterase I/nucleotide pyrophosphatase 1) (Plasma-cell membrane g
Observed Band	103-130 kDa
Calculated Molecular Weight	105 kDa
Cell Pathway	[Ectonucleotide pyrophosphatase/phosphodiesterase family member 1]: Cell membrane ; Single-pass type II membrane protein. Basolateral cell membrane ; Single-pass type II membrane protein. Targeted to the basolateral membrane in polarized epithelial cells and in hepatocytes, and to matrix vesicles in osteoblasts (PubMed:11598187). In bile duct cells and cancer cells, located to the apical cytoplasmic side (PubMed:11598187). .; [Ectonucleotide pyrophosphatase/phosphodiesterase family member 1, secreted form]: Secreted . Secreted following proteolytic cleavage. .
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 (PubMed:9344668). Expressed in melanocytes but not in keratinocytes (PubMed:28964717).



Function

catalytic activity: A dinucleotide + H₂O = 2 mononucleotides., catalytic activity: Hydrolytically removes 5'-nucleotides successively from the 3'-hydroxy termini of 3'-hydroxy-terminated oligonucleotides., caution: It is uncertain whether Met-1 or Met-53 is the initiator., cofactor: Binds 2 divalent metal cations per subunit., disease: Defects in ENPP1 are a cause of idiopathic infantile arterial calcification (IIAC) [MIM:208000]; also called generalized arterial calcification of infancy. IIAC is characterized by calcification of the internal elastic lamina of muscular arteries and stenosis due to myointimal proliferation., disease: Defects in ENPP1 are a cause of increased susceptibility for ossification of the posterior longitudinal ligament of the spine (OPLL) [MIM:602475]. OPLL is a common form of human myelopathy with a prevalence of as much as 4% in a variety of ethnic groups., disease: Defec

Background

This gene is a member of the ecto-nucleotide pyrophosphatase/phosphodiesterase (ENPP) family. The encoded protein is a type II transmembrane glycoprotein comprising two identical disulfide-bonded subunits. This protein has broad specificity and cleaves a variety of substrates, including phosphodiester bonds of nucleotides and nucleotide sugars and pyrophosphate bonds of nucleotides and nucleotide sugars. This protein may function to hydrolyze nucleoside 5'-triphosphates to their corresponding monophosphates and may also hydrolyze diadenosine polyphosphates. Mutations in this gene have been associated with 'idiopathic' infantile arterial calcification, ossification of the posterior longitudinal ligament of the spine (OPLL), and insulin resistance. [provided by RefSeq, Jul 2008],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images