

**Mouse Enpp1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP19754a**

**Specification**

**Mouse Enpp1 Antibody (N-term) - Product Information**

Application	WB, E
Primary Accession	<a href="#">P06802</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	103176
Antigen Region	29-57

**Mouse Enpp1 Antibody (N-term) - Additional Information**

**Gene ID** 18605

**Other Names**

Ectonucleotide pyrophosphatase/phosphodiesterase family member 1, E-NPP 1, Lymphocyte antigen 41, Ly-41, Phosphodiesterase I/nucleotide pyrophosphatase 1, Plasma-cell membrane glycoprotein PC-1, Alkaline phosphodiesterase I, Nucleotide pyrophosphatase, NPPase, Enpp1, Npps, Pcl, Pdnp1

**Target/Specificity**

This Mouse Enpp1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 29-57 amino acids from the N-terminal region of mouse Enpp1.

**Dilution**

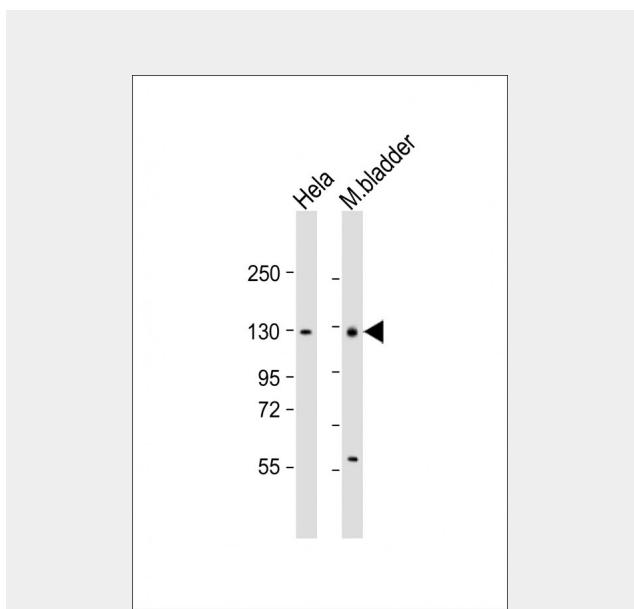
WB~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2



All lanes : Anti-Enpp1 Antibody (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysate  
 Lane 2: mouse bladder lysate  
 Lysates/proteins at 20 µg per lane.  
 Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.  
 Predicted band size : 103 kDa  
 Blocking/Dilution buffer: 5% NFDM/TBST.

**Mouse Enpp1 Antibody (N-term) - Background**

Involved primarily in ATP hydrolysis at the plasma membrane. Plays a role in regulating pyrophosphate levels, and functions in bone mineralization and soft tissue calcification. In vitro, has a broad specificity, hydrolyzing other nucleoside 5' triphosphates such as GTP, CTP, TTP and UTP to their corresponding monophosphates with release of pyrophosphate and diadenosine polyphosphates, and also 3',5'-cAMP to AMP. May also be involved in the regulation of the availability of nucleotide sugars in the endoplasmic reticulum and Golgi, and the regulation of purinergic signaling. Appears to modulate insulin sensitivity (By similarity).

weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### Precautions

Mouse Enpp1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Mouse Enpp1 Antibody (N-term) - Protein Information**

##### **Name** Enpp1

{ECO:0000303|PubMed:23027977,  
ECO:0000312|MGI:MGI:97370}

##### **Function**

Nucleotide pyrophosphatase that generates diphosphate (PPi) and functions in bone mineralization and soft tissue calcification by regulating pyrophosphate levels  
(PubMed:<a href="http://www.uniprot.org/citations/9662402"  
target="\_blank">9662402</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/10352096"  
target="\_blank">10352096</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/11004006"  
target="\_blank">11004006</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/12082181"  
target="\_blank">12082181</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/22510396"  
target="\_blank">22510396</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/25260930"  
target="\_blank">25260930</a>). PPi inhibits bone mineralization and soft tissue calcification by binding to nascent hydroxyapatite crystals, thereby preventing further growth of these crystals  
(PubMed:<a href="http://www.uniprot.org/c  
itations/9662402"  
target="\_blank">9662402</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/10352096"  
target="\_blank">10352096</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/11004006"  
target="\_blank">11004006</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/12082181"  
target="\_blank">12082181</a>,  
PubMed:<a href="http://www.uniprot.org/ci

tations/19419305"  
target="\_blank">19419305</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/22510396"  
target="\_blank">22510396</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/25260930"  
target="\_blank">25260930</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/25479107"  
target="\_blank">25479107</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/26910915"  
target="\_blank">26910915</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/30111653"  
target="\_blank">30111653</a>).  
Preferentially hydrolyzes ATP, but can also  
hydrolyze other nucleoside 5' triphosphates  
such as GTP, CTP, TTP and UTP to their  
corresponding monophosphates with  
release of pyrophosphate and diadenosine  
polyphosphates, and also 3',5'-cAMP to AMP  
(PubMed:<a href="http://www.uniprot.org/ci  
tations/11027689"  
target="\_blank">11027689</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/1647027"  
target="\_blank">1647027</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/23027977"  
target="\_blank">23027977</a>,  
PubMed:<a href="http://www.uniprot.org/ci  
tations/8223581"  
target="\_blank">8223581</a>). May also  
be involved in the regulation of the  
availability of nucleotide sugars in the  
endoplasmic reticulum and Golgi, and the  
regulation of purinergic signaling  
(PubMed:<a href="http://www.uniprot.org/ci  
tations/1647027"  
target="\_blank">1647027</a>). Inhibits  
ectopic joint calcification and maintains  
articular chondrocytes by repressing  
hedgehog signaling; it is however unclear  
whether hedgehog inhibition is direct or  
indirect (PubMed:<a href="http://www.unip  
rot.org/citations/30111653"  
target="\_blank">30111653</a>). Appears  
to modulate insulin sensitivity (By  
similarity). Also involved in melanogenesis  
(By similarity). Also able to hydrolyze  
2'-3'-cGAMP (cyclic GMP-AMP), a second  
messenger that activates TMEM173/STING  
and triggers type-I interferon production  
(PubMed:<a href="http://www.uniprot.org/ci  
tations/25344812"

[target="\\_blank">25344812](#)).  
2'-3'-cGAMP degradation takes place in the lumen or extracellular space, and not in the cytosol where it is produced; the role of 2'-3'-cGAMP hydrolysis is therefore unclear (By similarity). Not able to hydrolyze the 2'-3'-cGAMP linkage isomer 3'-3'-cGAMP (By similarity).

#### **Cellular Location**

[Ectonucleotide pyrophosphatase/phosphodiesterase family member 1]: Cell membrane; Single-pass type II membrane protein. Basolateral cell membrane; Single-pass type II membrane protein. Note=Targeted to the basolateral membrane in polarized epithelial cells and in hepatocytes, and to matrix vesicles in osteoblasts.

#### **Tissue Location**

Selectively expressed on the surface of antibody- secreting cells (PubMed:3104326). Expressed in osteocytes and osteoclasts (PubMed:25260930).

#### **Mouse Enpp1 Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)