

ENPP3 Blocking Peptide(C-term)

Synthetic peptide

Catalog # BP19749b

Specification

ENPP3 Blocking Peptide(C-term) - Product Information

Primary Accession

[O14638](#)

Other Accession

[NP_005012.2](#)**ENPP3 Blocking Peptide(C-term) - Additional Information**

Gene ID 5169

Other Names

Ectonucleotide pyrophosphatase/phosphodiesterase family member 3, E-NPP 3, Phosphodiesterase I beta, PD-Ibeta, Phosphodiesterase I/nucleotide pyrophosphatase 3, CD203c, Alkaline phosphodiesterase I, Nucleotide pyrophosphatase, NPPase, ENPP3, PDNP3

Target/Specificity

The synthetic peptide sequence is selected from aa 829-843 of HUMAN ENPP3

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ENPP3 Blocking Peptide(C-term) - Protein Information

Name ENPP3

Synonyms PDNP3 {ECO:0000303|PubMed:9344668}

Function

Hydrolase that metabolizes extracellular nucleotides, including ATP, GTP, UTP and CTP (PubMed:29717535). Limits mast cell and basophil responses during inflammation and during the chronic phases of allergic responses by eliminating the extracellular ATP that functions as signaling molecule and activates basophils and mast cells and induces the release of inflammatory cytokines. Metabolizes extracellular ATP in the lumen of the small intestine, and thereby prevents ATP-induced apoptosis of intestinal plasmacytoid dendritic cells (By similarity). Has also alkaline phosphodiesterase activity (PubMed:11342463).

Cellular Location

Cell membrane; Single-pass type II membrane protein. Apical cell membrane; Single-pass type II membrane protein. Secreted Note=Detected at the cell surface of basophils (PubMed:11342463) Detected at the apical plasma membrane of bile duct cells (PubMed:15072822). Located to the apical surface in intestinal and kidney epithelial cells. Secreted in serum, and in lumen of epithelial cells.

Tissue Location

Detected on bile ducts in liver, and in blood serum (at protein level) (PubMed:15072822). Detected in prostate and uterus (PubMed:9344668). Detected on basophils, but not neutrophils (PubMed:11342463).

ENPP3 Blocking Peptide(C-term) - Protocols

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

- [Blocking Peptides](#)

ENPP3 Blocking Peptide(C-term) - Images**ENPP3 Blocking Peptide(C-term) - Background**

The protein encoded by this gene belongs to a series of ectoenzymes that are involved in hydrolysis of extracellular nucleotides. These ectoenzymes possess ATPase and ATP pyrophosphatase activities and are type II transmembrane proteins. Expression of the related rat mRNA has been found in a subset of immature glial cells and in the alimentary tract. The corresponding rat protein has been detected in the pancreas, small intestine, colon, and liver. The human mRNA is expressed in glioma cells, prostate, and uterus. Expression of the human protein has been detected in uterus, basophils, and mast cells. [provided by RefSeq].

ENPP3 Blocking Peptide(C-term) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Ono, E., et al. J. Allergy Clin. Immunol. 125(2):483-489(2010)
Wolanczyk-Medrała, A., et al. Ann Agric Environ Med 16(2):301-304(2009)
Chirumbolo, S., et al. Inflamm. Res. 58(11):755-764(2009)
Ocmant, A., et al. J. Immunol. Methods 320 (1-2), 40-48 (2007) :