

ENPP7 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4923c

Specification

ENPP7 Antibody (Center) - Product Information

WB, FC, E Application **Primary Accession 06UWV6** Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 51478 Antigen Region 286-313

ENPP7 Antibody (Center) - Additional Information

Gene ID 339221

Other Names

Ectonucleotide pyrophosphatase/phosphodiesterase family member 7, E-NPP 7, NPP-7, Alkaline sphingomyelin phosphodiesterase, Intestinal alkaline sphingomyelinase, Alk-SMase, ENPP7 {ECO:0000312|EMBL:AAH414532}

Target/Specificity

This ENPP7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 286-313 amino acids from the Central region of human ENPP7.

Dilution

WB~~1:1000 FC~~1:10~50

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

Precautions

ENPP7 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ENPP7 Antibody (Center) - Protein Information

Name ENPP7 {ECO:0000312|EMBL:AAH41453.2, ECO:0000312|HGNC:HGNC:23764}



Function Choline-specific phosphodiesterase that hydrolyzes sphingomyelin releasing the ceramide and phosphocholine and therefore is involved in sphingomyelin digestion, ceramide formation, and fatty acid (FA) absorption in the gastrointestinal tract (PubMed:12885774, PubMed:12671034, PubMed:15205117, PubMed:16255717, PubMed:28292932). Has also phospholipase C activity and can also cleave phosphocholine from palmitoyl lyso-phosphatidylcholine and platelet-activating factor (PAF) leading to its inactivation (PubMed:16255717, PubMed:12885774). Does not have nucleotide pyrophosphatase activity (PubMed:12885774). May promote cholesterol absorption by affecting the levels of sphingomyelin derived from either diet or endogenous sources, in the intestinal lumen (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Note=The catalytic domain is released into the extracellular medium when cells are treated with trypsin (PubMed:15205117). Localized at the surface of the microvillar membrane in small intestine enterocytes, and in endosome-like structures situated beneath the microvillar membrane, and in Golgi complex (PubMed:12671034, PubMed:12885774)

Tissue Location

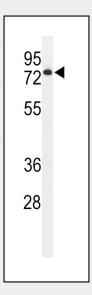
Detected in the colon (at protein level). Expressed in the duodenum, jejunum and liver and at low levels in the ileum Expression was very low in the esophagus, stomach and colon

ENPP7 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

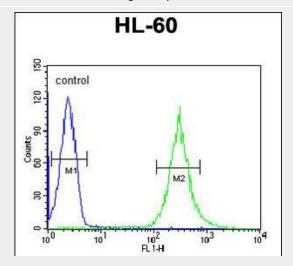
ENPP7 Antibody (Center) - Images



Western blot analysis of ENPP7 Antibody (Center) (Cat. #AP4923c) in HL-60 cell line lysates



(35ug/lane). ENPP7 (arrow) was detected using the purified Pab.



ENPP7 Antibody (Center) (Cat. #AP4923c) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ENPP7 Antibody (Center) - Background

ENPP7 converts sphingomyelin to ceramide. ENPP7 also has phospholipase C activity toward palmitoyl lyso-phosphocholine. ENPP7 does not appear to have nucleotide pyrophosphatase activity.

ENPP7 Antibody (Center) - References

Wu, J., et al. Biochem. J. 386 (PT 1), 153-160 (2005) Zhang, Z., et al. Protein Sci. 13(10):2819-2824(2004) Wu, J., et al. Carcinogenesis 25(8):1327-1333(2004)