

## **ENPP7** Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4923c

## Specification

# **ENPP7** Antibody (Center) - Product Information

Application Primary Accession Reactivity	FC, WB,E <u>O6UWV6</u> 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** FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

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:<u>12671034</u>, PubMed:<u>12885774</u>, PubMed:<u>15205117</u>, PubMed:<u>16255717</u>, PubMed:<u>28292932</u>). Also has phospholipase C activity and can also cleave phosphocholine from palmitoyl lyso-phosphatidylcholine and platelet-activating factor (PAF) leading to its inactivation (PubMed:<u>12885774</u>, PubMed:<u>16255717</u>). Does not have nucleotide pyrophosphatase activity (PubMed:<u>12885774</u>). 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**

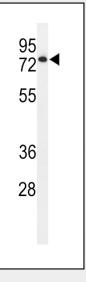
Detected in the colon (at protein level). Expressed in the duodenum, jejunum and liver and at low levels in the ileum Expression was very low in the esophagus, stomach and colon

# **ENPP7** Antibody (Center) - Protocols

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

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

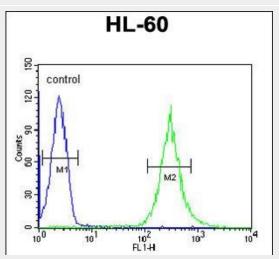
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ENPP7 Antibody (Center) - Images
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Western blot analysis of ENPP7 Antibody (Center) (Cat. #AP4923c) in HL-60 cell line lysates



(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)