10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# SMPD3 Antibody (N-term)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**

**Catalog # AP19071a**

## Specification

### SMPD3 Antibody (N-term) - Product Information

| | |
|---|---|
| Application | **WB,E** |
| Primary Accession | Q9NY59 |
| Other Accession | O35049, Q9JJY3, NP_061137.1 |
| Reactivity | **Human** |
| Predicted | **Mouse, Rat** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **71081** |
| Antigen Region | **137-165** |

### SMPD3 Antibody (N-term) - Additional Information

**Gene ID** 55512

**Other Names**
Sphingomyelin phosphodiesterase 3, Neutral sphingomyelinase 2, nSMase-2, nSMase2, Neutral sphingomyelinase II, SMPD3

**Target/Specificity**
This SMPD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 137-165 amino acids from the N-terminal region of human SMPD3.

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

**Precautions**
SMPD3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### SMPD3 Antibody (N-term) - Protein Information

**Name** SMPD3 (HGNC:14240)

**Function** Catalyzes the hydrolysis of sphingomyelin to form ceramide and phosphocholine. Ceramide mediates numerous cellular functions, such as apoptosis and growth arrest, and is capable of regulating these 2 cellular events independently. Also hydrolyzes sphingosylphosphocholine. Regulates the cell cycle by acting as a growth suppressor in confluent cells. Probably acts as a regulator of postnatal development and participates in bone and dentin mineralization (PubMed:10823942, PubMed:14741383, PubMed:15051724). Binds to anionic phospholipids (APLs) such as phosphatidylserine (PS) and phosphatidic acid (PA) that modulate enzymatic activity and subcellular location. May be involved in IL-1-beta-induced JNK activation in hepatocytes (By similarity). May act as a mediator in transcriptional regulation of NOS2/iNOS via the NF-kappa-B activation under inflammatory conditions (By similarity).

**Cellular Location**
Golgi apparatus membrane; Lipid-anchor. Cell membrane; Lipid-anchor. Note=May localize to detergent-resistant subdomains of Golgi membranes of hypothalamic neurosecretory neurons (PubMed:10823942). Localizes to plasma membrane in confluent contact- inhaibited cells (PubMed:15051724)

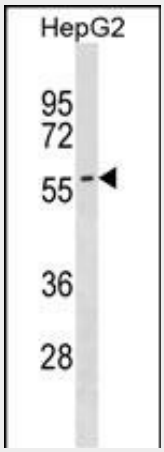
**Tissue Location**
Predominantly expressed in brain.

## SMPD3 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 Cytomety
- Cell Culture

## SMPD3 Antibody (N-term) - Images




SMPD3 Antibody (N-term) (Cat. #AP19071a) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the SMPD3 antibody detected the SMPD3 protein (arrow).

## SMPD3 Antibody (N-term) - Background

SMPD3 catalyzes the hydrolysis of sphingomyelin to form ceramide and phosphocholine. Ceramide mediates numerous cellular functions, such as apoptosis and growth arrest, and is capable of regulating these 2 cellular events independently. Also hydrolyzes sphingosylphosphocholine. Regulates the cell cycle by acting as a growth suppressor in confluent cells. Probably acts as a regulator of postnatal development and participates in bone and dentin mineralization.

**SMPD3 Antibody (N-term) - References**

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