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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
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
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)

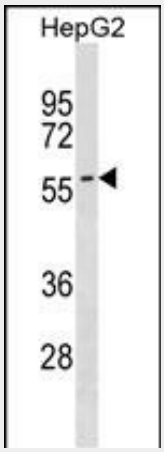
Tissue Location
Predominantly expressed in brain.

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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