

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 Ig
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

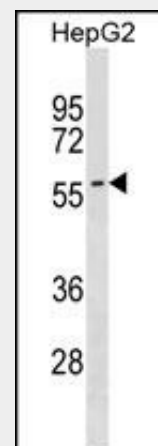
WB~~1:1000

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.



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

Bailey, S.D., et al. Diabetes Care
33(10):2250-2253(2010)
Filosto, S., et al. J. Biol. Chem.
285(14):10213-10222(2010)
Maupas-Schwalm, F., et al. Cell. Signal.
21(12):1925-1934(2009)
Talmud, P.J., et al. Am. J. Hum. Genet.
85(5):628-642(2009)
Ito, H., et al. Biochim. Biophys. Acta 1789

Precautions

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

(11-12), 681-690 (2009) :

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-inhibited 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 Cytometry](#)
- [Cell Culture](#)