

SMPD3 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP19071a**Specification****SMPD3 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q9NY59](#)**SMPD3 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID 55512****Other Names**

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SMPD3 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SMPD3 Antibody (N-term) Blocking Peptide - Images**SMPD3 Antibody (N-term) Blocking Peptide - Background**

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SMPD3 Antibody (N-term) Blocking Peptide - 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 (11-12), 681-690 (2009) :