

SGMS1 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP13562a**Specification**

SGMS1 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [Q86VZ5](#)**SGMS1 Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 259230**Other Names**

Phosphatidylcholine:ceramide cholinephosphotransferase 1, Medulla oblongata-derived protein, Protein Mob, Sphingomyelin synthase 1, Transmembrane protein 23, SGMS1, MOB, SMS1, TMEM23

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13562a was selected from the N-term region of SGMS1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

SGMS1 Antibody (N-term) Blocking peptide - Protein Information**Name** SGMS1**Synonyms** MOB, SMS1, TMEM23**Function**

Major sphingomyelin synthase at the Golgi apparatus (PubMed:17449912, PubMed:14685263). Catalyzes the reversible transfer of phosphocholine moiety in sphingomyelin biosynthesis: in the forward reaction transfers phosphocholine head group of phosphatidylcholine (PC) on to ceramide (CER) to form ceramide phosphocholine (sphingomyelin, SM) and diacylglycerol (DAG) as by-product, and in the reverse reaction transfers phosphocholine from SM to DAG to form PC and CER. The direction of the reaction depends on the levels of CER and DAG in Golgi membranes (PubMed:14685263, PubMed:17449912, PubMed:17449912, PubMed:17449912).

href="http://www.uniprot.org/citations/14976195" target="_blank">14976195, PubMed:17982138, PubMed:19454763). Does not use free phosphorylcholine or CDP-choline as donor (PubMed:14976195, PubMed:14685263). Regulates receptor-mediated signal transduction via mitogenic DAG and proapoptotic CER, as well as via SM, a structural component of membrane rafts that serve as platforms for signal transduction and protein sorting (PubMed:14976195, PubMed:17449912, PubMed:17982138). Plays a role in secretory transport via regulation of DAG pool at the Golgi apparatus and its downstream effects on PRKD1 (PubMed:18370930, PubMed:21980337).

Cellular Location

Golgi apparatus membrane; Multi-pass membrane protein

Tissue Location

Brain, heart, kidney, liver, muscle and stomach.

SGMS1 Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

SGMS1 Antibody (N-term) Blocking peptide - Images**SGMS1 Antibody (N-term) Blocking peptide - Background**

The protein encoded by this gene is predicted to be a five-pass transmembrane protein. This gene may be predominately expressed in brain.

SGMS1 Antibody (N-term) Blocking peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) ; Lafont, E., et al. Cell Death Differ. 17(4):642-654(2010) Vacaru, A.M., et al. J. Cell Biol. 185(6):1013-1027(2009) Wang, W., et al. Plant Cell 20(11):3163-3179(2008) Jin, Z.X., et al. Int. Immunol. 20(11):1427-1437(2008)