

Sphingomyelin Synthase 1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58134**Specification**

Sphingomyelin Synthase 1 Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q86VZ5
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48617

Sphingomyelin Synthase 1 Polyclonal Antibody - Additional Information**Gene ID** 259230**Other Names**

Phosphatidylcholine:ceramide cholinephosphotransferase 1, 2.7.8.27, Medulla oblongata-derived protein, Protein Mob, Sphingomyelin synthase 1, Transmembrane protein 23, SGMS1, MOB, SMS1, TMEM23

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Sphingomyelin Synthase 1 Polyclonal Antibody - Protein Information**Name** SGMS1**Synonyms** MOB, SMS1, TMEM23**Function**

Major sphingomyelin synthase at the Golgi apparatus (PubMed: [14685263](http://www.uniprot.org/citations/14685263), PubMed: [17449912](http://www.uniprot.org/citations/17449912)). 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](http://www.uniprot.org/citations/14685263), PubMed: [14976195](http://www.uniprot.org/citations/14976195), PubMed: [17449912](http://www.uniprot.org/citations/17449912), PubMed: [17982138](http://www.uniprot.org/citations/17982138)).

[19454763](http://www.uniprot.org/citations/19454763)). Does not use free phosphorylcholine or CDP-choline as donor (PubMed: [14685263](http://www.uniprot.org/citations/14685263), PubMed: [14976195](http://www.uniprot.org/citations/14976195)). 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](http://www.uniprot.org/citations/14976195), PubMed: [17449912](http://www.uniprot.org/citations/17449912), PubMed: [17982138](http://www.uniprot.org/citations/17982138)). Plays a role in secretory transport via regulation of DAG pool at the Golgi apparatus and its downstream effects on PRKD1 (PubMed: [18370930](http://www.uniprot.org/citations/18370930), PubMed: [21980337](http://www.uniprot.org/citations/21980337)).

Cellular Location

Golgi apparatus membrane; Multi-pass membrane protein

Tissue Location

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

Sphingomyelin Synthase 1 Polyclonal Antibody - 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](#)

Sphingomyelin Synthase 1 Polyclonal Antibody - Images