

Sgms1 Antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI13800**Specification**

Sgms1 Antibody - middle region - Product Information

Application	WB
Primary Accession	Q8VCQ6
Other Accession	NM_144792 , NP_659041
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog
Predicted	Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46kDa KDa

Sgms1 Antibody - middle region - Additional Information**Gene ID** 208449**Alias Symbol** 9530058O11Rik, AI841905, C80702, MGC30540, Mob, Sms1, Sor1, Tmem23**Other Names**

Phosphatidylcholine:ceramide cholinephosphotransferase 1, 2.7.8.27, Protein Mob, Sphingomyelin synthase 1, Transmembrane protein 23, Sgms1, Tmem23

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-Sgms1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

Sgms1 Antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Sgms1 Antibody - middle region - Protein Information**Name** Sgms1**Synonyms** Tmem23**Function**

Major sphingomyelin synthase at the Golgi apparatus. 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. Converts the newly synthesized CER, that is transported from the endoplasmic reticulum to the trans-Golgi by the Cer transport protein (CERT), to SM. Can form a heteromeric complex with glucosylceramide synthase (GCS) increasing SMS activity and reducing glucosylceramide synthesis, a critical mechanism that controls the metabolic fate of CER in the Golgi (By similarity). Does not use free phosphorylcholine or CDP-choline as donor. Can also transfer phosphoethanolamine head group of phosphatidylethanolamine (PE) on to CER to form ceramide phosphoethanolamine (CPE) (PubMed:25605874). 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:16879426, PubMed:22580896). Plays a role in secretory transport via regulation of DAG pool at the Golgi apparatus and its downstream effects on PRKD1 (By similarity).

Cellular Location

Golgi apparatus membrane {ECO:0000250|UniProtKB:Q86VZ5}; Multi-pass membrane protein

Tissue Location

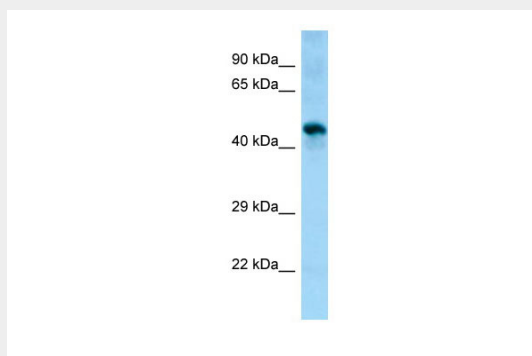
Isoform 1 is widely expressed, isoform 2 shows a more narrow distribution and isoform 3 is detected only in testis and heart.

Sgms1 Antibody - middle region - 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](#)

Sgms1 Antibody - middle region - Images



WB Suggested Anti-Sgms1 Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Muscle

Sgms1 Antibody - middle region - References

Yang Z.,et al.Gene 363:123-132(2005).
Carninci P.,et al.Science 309:1559-1563(2005).
Huitema K.,et al.EMBO J. 23:33-44(2004).
Yang Z.,et al.FEMS Yeast Res. 6:751-762(2006).
Li Z.,et al.Arterioscler. Thromb. Vasc. Biol. 32:1577-1584(2012).