

**DATASHEET**

**SMS1 Rabbit Polyclonal Antibody**

CAT. NO. APA16832

**KEY FEATURES**

Target	SMS1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

**BACKGROUND**

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 .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to SMS1
Specificity	Recognizes endogenous levels of SMS1 protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human SMS1. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 25; Observed: 49 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	MOB; SMS1; TMEM23; Phosphatidylcholine:ceramide cholinephosphotransferase 1; Medulla oblongata-derived protein; Protein Mob; Sphingomyelin synthase 1; Transmembrane protein 23
Gene Symbol	SGMS1
Entrez Gene	259230(Human); 208449(Mouse); 353229(Rat)
SwissProt	Q86VZ5(Human); Q8VCQ6(Mouse); Q7TSX5(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

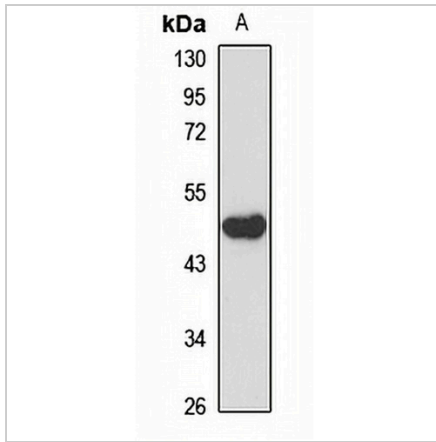
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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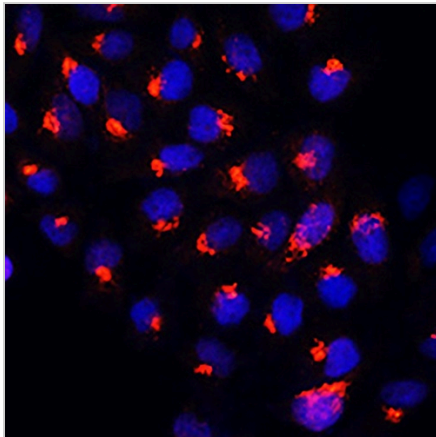
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**DATA**



Western blot analysis of SMS1 expression in A549 (A) whole cell lysates. (Predicted band size: 25; 49 kD; Observed band size: 49 kD)



Immunofluorescent analysis of SMS1 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.