

Product datasheet for **TA338891**

Spingomyelin Synthase 2 (SGMS2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-SGMS2 antibody: synthetic peptide directed towards the N terminal of human SGMS2. Synthetic peptide located within the following region: KFPLEWWKTGIAFIYAVFNLVLTVMITVHERVPPKELSPPLPDKFFDY
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Concentration:	lot specific
Purification:	Protein A purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	42 kDa
Gene Name:	sphingomyelin synthase 2
Database Link:	NP_689834 Entrez Gene 166929 Human Q8NHU3



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Background:

SGMS2 is a bidirectional lipid cholinephosphotransferase capable of converting phosphatidylcholine (PC) and ceramide to sphingomyelin (SM) and diacylglycerol (DAG) and vice versa. Direction is dependent on the relative concentrations of DAG and ceramide as phosphocholine acceptors. SGMS2 directly and specifically recognizes the choline head group on the substrate. SGMS2 also requires two fatty chains on the choline-P donor molecule in order to be recognized efficiently as a substrate. SGMS2 does not function strictly as a SM synthase. SGMS2 is required for cell growth. Sphingomyelin (SM) is a major component of plasma membranes. It is preferentially concentrated in the outer leaflet and has a role in the formation of lipid rafts. SM synthases (EC 2.7.8.27), such as SGMS2, produce SM in the lumen of the Golgi and on the cell surface through the transfer of phosphocholine from phosphatidylcholine onto ceramide, yielding diacylglycerol as a side product (Huitema et al., 2004 [PubMed 14685263]). [supplied by OMIM]. Sequence Note: removed 3 bases from the 5' end that did not align to the reference genome assembly. PRIMARYREFSEQ_SPAN PRIMARY_IDENTIFIER PRIMARY_SPAN COMP 1-2142 BC041369.2 4-2145

Synonyms:

SMS2

Note:

Immunogen Sequence Homology: Dog: 100%; Pig: 100%; Rat: 100%; Horse: 100%; Human: 100%; Mouse: 100%; Bovine: 100%; Rabbit: 100%; Guinea pig: 100%; Zebrafish: 93%

Protein Families:

Druggable Genome, Transmembrane

Protein Pathways:

Metabolic pathways, Sphingolipid metabolism

Product images:

WB Suggested Anti-SGMS2 Antibody Titration:
0.2-1 ug/ml; ELISA Titer: 1: 1562500; Positive
Control: 293T cell lysate