

**PTDSS2 Antibody (N-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13051a****Specification**

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**PTDSS2 Antibody (N-term) Blocking peptide - Product Information**Primary Accession [Q9BVG9](#)**PTDSS2 Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 81490**Other Names**

Phosphatidylserine synthase 2, PSS-2, PtdSer synthase 2, Serine-exchange enzyme II, PTDSS2, PSS2

**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.

**PTDSS2 Antibody (N-term) Blocking peptide - Protein Information****Name** PTDSS2**Synonyms** PSS2**Function**

Catalyzes a base-exchange reaction in which the polar head group of phosphatidylethanolamine (PE) or phosphatidylcholine (PC) is replaced by L-serine (PubMed:<a href="http://www.uniprot.org/citations/19014349" target="\_blank">19014349</a>). Catalyzes the conversion of phosphatidylethanolamine and does not act on phosphatidylcholine (PubMed:<a href="http://www.uniprot.org/citations/19014349" target="\_blank">19014349</a>). Can utilize both phosphatidylethanolamine (PE) plasmalogen and diacyl PE as substrate and the latter is six times better utilized, indicating the importance of an ester linkage at the sn-1 position (By similarity). Although it shows no sn-1 fatty acyl preference, exhibits significant preference towards docosahexaenoic acid (22:6n-3) compared with 18:1 or 20:4 at the sn-2 position (By similarity).

**Cellular Location**

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9Z1X2}; Multi-pass membrane protein. Note=Highly enriched in the mitochondria-associated membrane (MAM). {ECO:0000250|UniProtKB:Q9Z1X2}

**PTDSS2 Antibody (N-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**PTDSS2 Antibody (N-term) Blocking peptide - Images****PTDSS2 Antibody (N-term) Blocking peptide - Background**

Phosphatidylserine (PS) accounts for 5 to 10% of cell membrane phospholipids. In addition to its role as a structural component, PS is involved in cell signaling, blood coagulation, and apoptosis. PS is synthesized by a calcium-dependent base-exchange reaction catalyzed by PS synthases (EC 2.7.8.8), like PTDSS2, that exchange L-serine for the polar head group of phosphatidylcholine (PC) or phosphatidylethanolamine (PE) (Sturbois-Balcerzak et al., 2001 [PubMed 11084049]).

**PTDSS2 Antibody (N-term) Blocking peptide - References**

Tomohiro, S., et al. Biochem. J. 418(2):421-429(2009) Olsen, J.V., et al. Cell 127(3):635-648(2006) Olsen, J.V., et al. Cell 127(3):635-648(2006) Grandmaison, P.A., et al. Biochim. Biophys. Acta 1636(1):1-11(2004) Sturbois-Balcerzak, B., et al. J. Biol. Chem. 276(11):8205-8212(2001)