

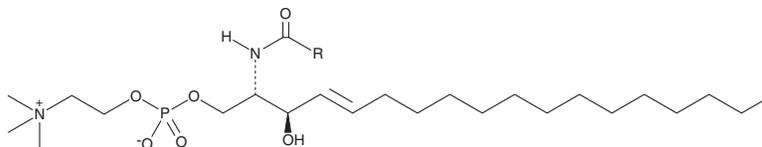
# PRODUCT INFORMATION



## Spingomyelin (porcine RBC)

Item No. 31558

CAS Registry No.: 85187-10-6  
Synonym: SMs (porcine RBC)  
MF:  $C_{47}H_{95}N_2O_6P$  (for lignoceroyl)  
FW: 815.3  
Purity:  $\geq 98\%$   
Supplied as: A solid  
Storage:  $-20^\circ\text{C}$   
Stability:  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Spingomyelin (porcine RBC) is supplied as a solid. A stock solution may be made by dissolving the spingomyelin (porcine RBC) in the solvent of choice, which should be purged with an inert gas. Spingomyelin (porcine RBC) is soluble in ethanol and chloroform.

### Description

Spingomyelins (SMs) are bioactive sphingolipids found in mammalian cell membranes.<sup>1</sup> SMs make up 2-15% of the total organ phospholipid population but are found at higher concentrations in the brain and myelin sheaths surrounding peripheral nerves. They interact with cholesterol to control its distribution within cellular membranes and maintain cholesterol homeostasis in cells. SMs undergo hydrolysis by spingomyelinase to form ceramides, which are sphingolipid mediators of intracellular signaling.<sup>2</sup> This product contains SM molecular species with primarily C16:0 and C24:0 fatty acyl chain lengths. As this product is derived from a natural source, there may be variations in the sphingoid backbone.

### References

1. Slotte, J.P. and Ramstedt, B. The functional role of spingomyelin in cell membranes. *Eur. J. Lipid Sci. Technol.* **109(10)**, 977-981 (2007).
2. Shayman, J.A. Sphingolipids. *Kidney Int.* **58(1)**, 11-26 (2000).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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