

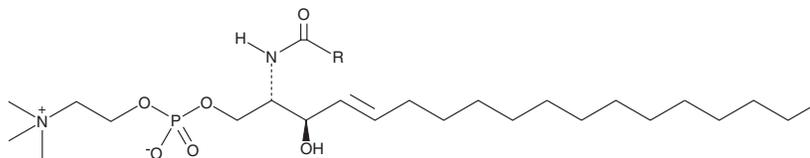
PRODUCT INFORMATION



Spingomyelin (chicken egg)

Item No. 24345

CAS Registry No.: 383907-87-7
Synonym: SMs (egg)
MF: $C_{39}H_{79}N_2O_6P$ (for palmitoyl)
FW: 703.0
Purity: $\geq 95\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



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

Laboratory Procedures

Spingomyelin (SM) (chicken egg) is supplied as a solid. A stock solution may be made by dissolving the SM (chicken egg) in the solvent of choice. SM (chicken egg) is soluble in ethanol (warm), chloroform, and methanol.

Description

SMs are bioactive sphingolipids found in mammalian cell membranes.¹ 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 sphingomyelinase to form ceramides, which are sphingolipid mediators of intracellular signaling.² This product contains SM molecular species with primarily C16:0 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 sphingomyelin 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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