

# PRODUCT INFORMATION



## L-threo Lysosphingomyelin (d18:1)

Item No. 24454

CAS Registry No.: 105615-55-2

Formal Name: 2-[[[[-2S-amino-3S-hydroxy-4E-octadecen-1-yl]oxy]hydroxyphosphinyl]oxy]-N,N,N-trimethylethanaminium, inner salt

Synonyms: L-threo Lyso SM(18:1),  
L-threo Lysosphingomyelin (18:1),  
L-threo Sphingosine-1-Phosphocholine (d18:1),  
L-threo-Sphingosylphosphorylcholine

MF:  $C_{23}H_{49}N_2O_5P$

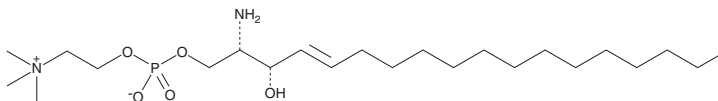
FW: 464.6

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

L-threo Lysosphingomyelin (d18:1) is supplied as a solid. A stock solution may be made by dissolving the L-threo lysosphingomyelin (d18:1) in the solvent of choice, which should be purged with an inert gas. L-threo Lysosphingomyelin (d18:1) is soluble in a 2:1 solution of chloroform:methanol.

### Description

L-threo Lysosphingomyelin is an endogenous bioactive sphingolipid and isomer of lysosphingomyelin (Item No. 10007947).<sup>1</sup> It is an agonist of sphingosine-1-phosphate (S1P) receptors 1-3 ( $EC_{50}$ s = 19.3, 313.3, and 131.8 nM for human S1P<sub>1-3</sub>, respectively). As this product is derived from a natural source, there may be variations in the sphingoid backbone.

### Reference

1. Im, D.S., Clemens, J., Macdonald, T.L., *et al.* Characterization of the human and mouse sphingosine 1-phosphate receptor, S1P5 (Edg-8): Structure-activity relationship of sphingosine 1-phosphate receptors. *Biochemistry* **40**(46), 14053-14060 (2001).

#### 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.

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