# PRODUCT INFORMATION



# C16 Ceramide-1-phosphate (d18:1/16:0) (ammonium salt)

Item No. 22542

CAS Registry No.: 1246303-22-9

Formal Name: N-[(1S,2R,3E)-2-hydroxy-1-

> [(phosphonooxy)methyl]-3heptadecen-1-yl]-hexadecanamide,

monoammonium salt

Synonyms: C16 C1P, C16 Ceramide-1-

phosphate, Ceramide-1-phosphate

(d18:1/16:0), CerP(d18:1/16:0)

MF: C<sub>34</sub>H<sub>67</sub>NO<sub>6</sub>P • NH<sub>4</sub>

FW: 634.9 **Purity:** ≥98% Supplied as: A solid -20°C Storage: Stability: ≥4 years

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

## **Laboratory Procedures**

C16 Ceramide-1-phosphate (C16 C1P) (d18:1/16:0) (ammonium salt) is supplied as a solid. A stock solution may be made by dissolving the C16 C1P (d18:1/16:0) (ammonium salt) in the solvent of choice. C16 C1P (d18:1/16:0) (ammonium salt) is soluble in a 80:20:2 solution of chloroform:methanol:ammonium hydroxide.

### Description

C16 C1P is one of the main forms of C1P found in cells.<sup>1</sup> It is created by phosphorylation of C16 ceramide (Item No. 10681) by ceramide kinase. C16 C1P activates cytosolic phospholipase  $A_2\alpha$  (PLA<sub>2</sub> $\alpha$ ) and stimulates the release of arachidonic acid (Item No. 90010 | 10006607) in A549 cells.<sup>2</sup>

### References

- 1. Lamour, N.F., Stahelin, R.V., Wijesinghe, D.S., et al. Ceramide kinase uses ceramide provided by ceramide transport protein: Localization to organelles of eicosanoid synthesis. J. Lipid Res. 48(6), 1293-1304 (2007).
- 2. Wijesinghe, D.S., Subramanian, P., Lamour, N.F., et al. Chain length specificity for activation of cPLA2α by C1P: Use of the dodecane delivery system to determine lipid-specific effects. J. Lipid Res. 50(10), 1986-1995 (2009).

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

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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