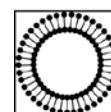


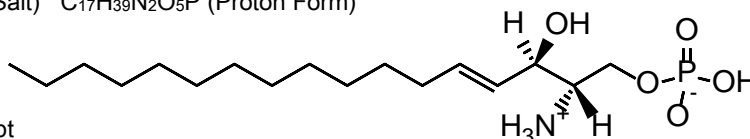
Heptadecasphing-4-ene-1-phosphate

C17 Sphingosine-1-phosphate

LIPIDMAPS™ Compound ID: LMSP01040004


Avanti[®]
POLAR LIPIDS, INC.

Molecular Weight: 382.48 (Ammonium Salt) 365.45 (Proton Form)
 Exact Mass: 382.26 (Ammonium Salt) 365.23 (Proton Form)
 Molecular Formula: C₁₇H₄₃N₃O₅P (Ammonium Salt) C₁₇H₃₉N₂O₅P (Proton Form)
 Storage: -20° C (Freezer)
 Manufacture Date: May 14, 2018
 Expiration Date: One year from date of receipt
 Physical Form: Ethanol Solution (1ml per vial)
 Concentration: 10.01 µg/ml (27.40 µM)
 Lot Number: LM2144-LM17-032B
 MLOT: 6434EAB032



Certificate of Analysis

| Test | Limits | Result |
|---|---|-------------------------|
| Mass Spec | Consistent with Structure, [M-H] ⁻ = 364.2 ± 1 amu or [M+H] ⁺ = 366.2 ± 1 amu | Pass |
| Quantitative LC/MS | Run and Report | 10.01 µg/ml 27.40 µM |
| Proton NMR | Consistent with Structure | Pass |
| TLC Analysis (Mobile Phase 10:10:3 Chloroform:Methanol:Water) | R _f consistent with structure, NLT 99% Purity | Pass |
| Ninhydrin | Positive | Positive |
| Iodine | One Major Spot | One Major Spot |
| Phosphorus | Positive | Positive |
| Char | Positive | Positive |
| Wet Dip | One Major Spot | One Major Spot |

Approved by:

Avanti Polar Lipids, Inc. 700 Industrial Park Drive, Alabaster, AL 35007-9105, USA

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