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## Product Information

### N-Acetyl-D-sphingosine

Product Number **A 7191**

Storage Temperature -0 °C

#### Product Description

Molecular Formula:  $C_{20}H_{39}NO_3$

Molecular Weight: 341.5

CAS Number: 3102-57-6

Synonym: C2 Ceramide

This compound is a less hydrophobic analog of natural ceramides, which makes it an active cell permeable surrogate. It induces monocytic differentiation and cytostasis of HL-60 Cells.<sup>1,2</sup> It has been reported to induce a dose-dependent decrease in the uptake of tritiated thymidine.<sup>3</sup> It activates a T9 cell cytosolic serine/threonine protein phosphatase at 0.1  $\mu$ M.<sup>4</sup>

This product is semisynthetic.

#### Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

#### Preparation Instructions

This product is soluble in DMSO (20 mM) and chloroform (20 mg/ml) at room temperature.

#### References

1. Okazaki, T., et al., Role of Ceramide As a Lipid Mediator of 1- $\alpha$ ,25-dihydroxyvitamin D3-induced HL-60 Cell Differentiation. *J. Biol. Chem.*, **265(26)**, 15823-15831 (1990).
2. Kim, M. Y., et al., Identification of Sphingomyelin Turnover As an Effector Mechanism For the Action Of Tumor Necrosis Factor  $\alpha$  and  $\lambda$ -interferon. Specific Role In Cell Differentiation. *J. Biol. Chem.*, **266(1)**, 484-189 (1991).
3. Dobrowsky, R. T., et al., Activation of the Sphingomyelin Cycle Through the Low-affinity Neurotrophin Receptor. *Science*, **265(5178)**, 1596-1599 (1994).
4. Dobrowsky, R. T., Hannun, and Y. A., Ceramide Stimulates a Cytosolic Protein Phosphatase. *J. Biol. Chem.*, **267(8)**, 5048-5051 (1992).

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