

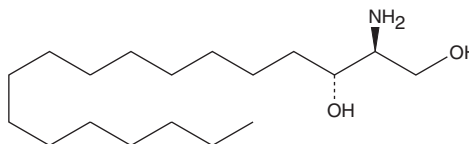
# PRODUCT INFORMATION



## Sphinganine (d18:0)

Item No. 10007945

**CAS Registry No.:** 764-22-7  
**Formal Name:** 2S-amino-1,3R-octadecanediol  
**Synonyms:** Dihydrosphingosine,  
D-erythro-Dihydrosphingosine,  
Dihydro-D-erythro Sphingosine,  
Sphinganine, D-erythro-Sphinganine  
**MF:** C<sub>18</sub>H<sub>39</sub>NO<sub>2</sub>  
**FW:** 301.5  
**Purity:** ≥95%  
**Supplied as:** A crystalline 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

Sphinganine (d18:0) is supplied as a crystalline solid. A stock solution may be made by dissolving the sphinganine (d18:0) in the solvent of choice, which should be purged with an inert gas. Sphinganine (d18:0) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of sphinganine (d18:0) in these solvents is approximately 2 and 10 mg/ml, respectively. Sphinganine (d18:0) is miscible in ethanol.

### Description

Sphinganine (d18:0) is a precursor of ceramide and sphingosine as well as a substrate of sphingosine kinases, which generate sphinganine-1-phosphate. Sphinganine levels increase significantly in response to certain mycotoxins, including fumonisins, as well as in some cancers.<sup>1-3</sup> Sphinganine can block protein kinase C activation in some cases but not others.<sup>4,5</sup> Sphinganine-1-phosphate can emulate sphingosine-1-phosphate in cell signaling or have opposite intracellular effects.<sup>6-8</sup>

### References

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#### 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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