

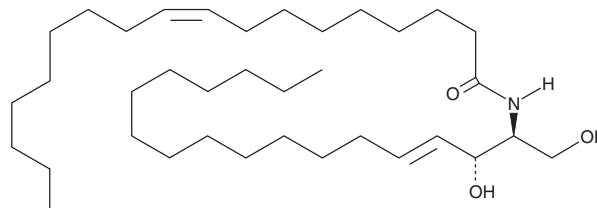
# PRODUCT INFORMATION



## C18:1 Ceramide (d18:1/18:1(9Z))

Item No. 24397

**CAS Registry No.:** 5966-28-9  
**Formal Name:** N-[(1S,2R,3E)-2-hydroxy-1-(hydroxymethyl)-3-heptadecen-1-yl]-9Z-octadecenamide  
**Synonyms:** Cer(d18:1/18:1(9Z)), C18:1 Ceramide  
Ceramide (d18:1/18:1(9Z)),  
N-Octadecenoyl-(cis-9)-D-erythro-Sphingosine  
**MF:** C<sub>36</sub>H<sub>69</sub>NO<sub>3</sub>  
**FW:** 563.9  
**Purity:** ≥98%  
**Supplied as:** A 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

C18:1 Ceramide (d18:1/18:1(9Z)) is supplied as a solid. A stock solution may be made by dissolving the C18:1 ceramide (d18:1/18:1(9Z)) in the solvent of choice. C18:1 Ceramide (d18:1/18:1(9Z)) is soluble in ethanol (hot), chloroform, and dimethyl formamide.

### Description

C18:1 Ceramide is a naturally occurring ceramide.<sup>1-3</sup> Levels of C18:1 ceramide are elevated in overweight and insulin-resistant mice and cattle.<sup>1,2</sup> C18:1 Ceramide is also increased in the plasma and ovarian tissue of patients with advanced ovarian cancer.<sup>3</sup>

### References

1. Sajan, M.P., Ivey, R.A., Lee, M.C., *et al.* Hepatic insulin resistance in ob/ob mice involves increases in ceramide, aPKC activity, and selective impairment of Akt-dependent FoxO1 phosphorylation. *J. Lipid Res.* **56(1)**, 70-80 (2015).
2. Rico, J.E., Bandaru, V.V., Dorskind, J.M., *et al.* Plasma ceramides are elevated in overweight Holstein dairy cows experiencing greater lipolysis and insulin resistance during the transition from late pregnancy to early lactation. *J. Dairy Sci.* **98(11)**, 7757-7770 (2015).
3. Knapp, P., Bodnar, L., Błachnio-Zabielska, A., *et al.* Plasma and ovarian tissue sphingolipids profiling in patients with advanced ovarian cancer. *Gynecol. Oncol.* **147(1)**, 139-144 (2017).

#### 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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