# PRODUCT INFORMATION



## C2 L-erythro Ceramide (d18:1/2:0)

Item No. 24387

CAS Registry No.: 150338-90-2

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

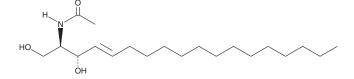
3-heptadecen-1-yl]-acetamide

Synonyms: L-erythro Cer(d18:1/2:0),

> L-erythro Ceramide (d18:1/2:0), N-acetyl-L-erythro-Sphingosine

 $C_{20}H_{39}NO_3$ 

MF: FW: 341.5 **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**

C2 L-erythro Ceramide (d18:1/2:0) is supplied as a solid. A stock solution may be made by dissolving the C2 L-erythro ceramide (d18:1/2:0) in the solvent of choice, which should be purged with an inert gas. C2 L-erythro Ceramide (d18:1/2:0) is soluble in organic solvents such as chloroform, ethanol, methanol, DMSO, and dimethyl formamide.

#### Description

C2 L-erythro Ceramide is a bioactive sphingolipid and a cell-permeable analog of naturally occurring ceramides. 1 It stimulates cholesterol efflux in CHO cells expressing the human ABCA1 receptor when used at a concentration of 10 µM, however, this efflux is >50% less than that stimulated by C2 ceramide (Item No. 62510). C2 L-erythro Ceramide also induces cell cycle arrest in the G<sub>0</sub>/G<sub>1</sub> phase and a 50-fold increase in sphingosine accumulation as well as inhibits growth of HL-60 leukemia cells.<sup>2,3</sup>

#### References

- 1. Ghering, A.B. and Davidson, W.S. Ceramide structural features required to stimulate ABCA1-mediated cholesterol efflux to apolipoprotein A-I. J. Lipid Res. 47(12), 2781-2788 (2006).
- Baek, M.Y., Yoo, H.S., Nakaya, K., et al. Sphingolipid metabolic changes during chiral C2-ceramides induced apoptosis in human leukemia cells. Arch. Pharm. Res. 24(2), 144-149 (2001).
- 3. Bielawska, A., Crane, H.M., Liotta, D., et al. Selectivity of ceramide-mediated biology. J. Biol. Chem. 268(35), 26226-26232 (1993).

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.

## WARRANTY AND LIMITATION OF REMEDY

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/26/2022

#### **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM