



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

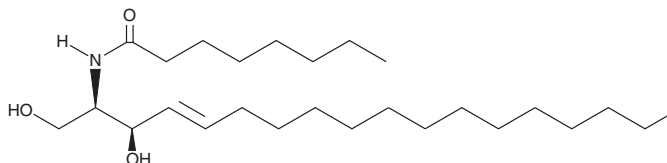
# PRODUCT INFORMATION



## C8 D-threo Ceramide (d18:1/8:0)

Item No. 24391

**CAS Registry No.:** 175892-43-0  
**Formal Name:** N-[(1R,2R,3E)-2-hydroxy-1-(hydroxymethyl)-3-heptadecen-1-yl]-octanamide  
**Synonyms:** D-threo Cer(d18:1/8:0), D-threo Ceramide (d18:1/8:0), N-octanoyl-D-threo-Sphingosine,  
**MF:** C<sub>26</sub>H<sub>51</sub>NO<sub>3</sub>  
**FW:** 425.7  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

C8 D-threo Ceramide (d18:1/8:0) is supplied as a solid. A stock solution may be made by dissolving the C8 D-threo ceramide (d18:1/8:0) in the solvent of choice. C8 D-threo Ceramide (d18:1/8:0) is soluble in organic solvents such as ethanol, chloroform, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of C8 D-threo ceramide (d18:1/8:0) in DMF is approximately 5 mg/ml.

### Description

C8 D-threo Ceramide is a bioactive sphingolipid and cell-permeable analog of naturally occurring ceramides.<sup>1</sup> It is cytotoxic to U937 cells (IC<sub>50</sub> = 17 μM) and induces nuclear DNA fragmentation 5- to 6-fold more potently than C8 ceramide (Item No. 62540).<sup>1,2</sup> C8 D-threo Ceramide is a substrate for *E. coli* diacylglycerol kinase.<sup>1</sup> It activates ceramide-activated protein kinase (CAPK) in U937 cells. C8 D-threo Ceramide also enhances *V. cholerae* cytotoxin pore formation in liposome lipid membranes, as measured by calcein release, with a 50% release dose (RD<sub>50</sub>) value of ~5 μg/ml.<sup>3</sup>

### References

1. Karasavvas, N., Erukulla, R.K., Bittman, R., *et al.* Stereospecific induction of apoptosis in U937 cells by N-octanoyl-sphingosine stereoisomers and N-octyl-sphingosine. The ceramide amide group is not required for apoptosis. *Eur. J. Biochem.* **236(2)**, 729-737 (1996).
2. Chang, Y.-T., Choi, J., Ding, S., *et al.* The synthesis and biological characterization of a ceramide library. *J. Am. Chem. Soc.* **124(9)**, 1856-1857 (2002).
3. Zitzer, A., Bittman, R., Verbicky, C.A., *et al.* Coupling of cholesterol and cone-shaped lipids in bilayers augments membrane permeabilization by the cholesterol-specific toxins streptolysin O and *Vibrio cholerae* cytotoxin. *J. Biol. Chem.* **276(18)**, 14628-14633 (2001).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer 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, 04/24/2018

#### 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