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

www.szabo-scandic.com

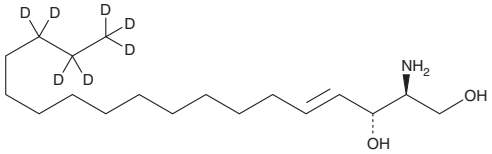
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

Sphingosine-d_7 (d18:1)

Item No. 22786

CAS Registry No.:	1246304-34-6
Formal Name:	(2S,3R,4E)-2-amino-4-octadecene-16,16,17,17,18,18,18-d_7-1,3-diol
Synonyms:	(–)-Sphingosine-d_7, D-*erythro*-Sphingosine C-18-d_7
MF:	$C_{18}H_{30}D_7NO_2$
FW:	306.5
Chemical Purity:	≥98% (Sphingosine (d18:1))
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_7); ≤1% d_0
Supplied as:	A crystalline 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

Sphingosine-d_7 (d18:1) is intended for use as an internal standard for the quantification of sphingosine (d18:1) (Item No. 10007907) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Sphingosine-d_7 (d18:1) is supplied as a crystalline solid. A stock solution may be made by dissolving the sphingosine-d_7 (d18:1) in the solvent of choice. Sphingosine-d_7 (d18:1) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of sphingosine-d_7 (d18:1) in these solvents is approximately 2 and 20 mg/ml, respectively. Sphingosine-d_7 (d18:1) is also miscible in ethanol.

Description

Sphingosine (d18:1) is formed primarily from the breakdown of ceramide.[1] Sphingosine (d18:1) inhibits protein kinase C and phosphatidic acid phosphohydrolase, whereas it activates phospholipase D and diacylglycerol (DAG) kinase.[1] Phosphorylation of sphingosine (d18:1) by sphingosine kinases 1 and 2 (SPHK1, SPHK2) produces sphingosine-1-phosphate, a potent bioactive lipid that exhibits a broad spectrum of biological activities including cell proliferation, survival, migration, cytoskeletal organization, and morphogenesis.[2-4]

References

1. Hannun, Y.A., Luberto, C., and Argraves, K.M. Enzymes of sphingolipid metabolism: From modular to integrative signaling. *Biochemistry* **40(16)**, 4893-4903 (2001).
2. Takuwa, Y., Takuwa, N., and Sugimoto, N. The Edg family G protein-coupled receptors for lysophospholipids: Their signaling properties and biological activities. *J. Biochem.* **131(6)**, 767-771 (2002).
3. Ishii, I., Fukushima, N., Ye, X., *et al.* Lysophospholipid receptors: Signaling and biology. *Annu. Rev. Biochem.* **73**, 321-354 (2004).
4. Kluk, M.J. and Hla, T. Signaling of sphingosine-1-phosphate via the S1P/EDG-family of G-protein-coupled receptors. *Biochim. Biophys. Acta* **1582(1-3)**, 72-80 (2002).

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, 04/17/2019

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