PRODUCT INFORMATION



C24:1 Ceramide-d₇ (d18:1-d₇/24:1(15Z))

Item No. 22790

CAS Registry No.:	1840942-16-6
Formal Name:	(Z)-N-((2S,3R,E)-1,3-dihydroxyoctadec-
	4-en-2-yl-16,16,17,17,18,18,18-d ₇)
	tetracos-15-enamide
Synonyms:	Cer(d18:1-d ₇ /24:1(15Z)), Ceramide-d ₇
	(d18:1-d ₇ /24:1(15Z)), Nervonic Ceramide-d ₇ ,
	N-Nervonoyl-D-erythro-Sphingosine-d ₇ ∇^{D} ∇^{D} \downarrow^{D}
MF:	$C_{42}H_{74}D_7NO_3$
FW:	655.2 D D OH
Chemical Purity:	≥95% (C24:1 Ceramide)
Deuterium	ОН
Incorporation:	\geq 99% deuterated forms (d ₁ -d ₇); \leq 1% d ₀
UV/Vis.:	λ_{max} : 202 nm
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

C24:1 Ceramide- d_7 (d18:1- d_7 /24:1(15Z)) is intended for use as an internal standard for the quantification of C24:1 ceramide (Item No. 62530) 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).

C24:1 Ceramide-d₇ (d18:1-d₇/24:1(15Z)) is supplied as a crystalline solid. A stock solution may be made by dissolving the C24:1 ceramide- d_7 (d18:1- d_7 /24:1(15Z)) in the solvent of choice. C24:1 Ceramide- d_7 $(d18:1-d_7/24:1(15Z))$ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of C24:1 ceramide- d_7 (d18:1- d_7 /24:1(15Z)) in these solvents is approximately 10, 0.02, and 5.5 mg/ml, respectively.

Description

C24:1 Ceramide-d₇ is an abundant naturally occurring ceramide.¹⁻³

References

- 1. Gu, Q., Kerwin, J.L., Watts, J.D., et al. Ceramide profiling of complex lipid mixtures by electrospray ionization mass spectrometry. Anal. Biochem. 244(2), 347-356 (1997).
- 2. Clayton, R.B., Cooper, J.M., Curstedt, T., et al. Stimulation of erythroblast maturation in vitro by sphingolipids. J. Lipid Res. 15(6), 557-562 (1974).
- 3. Krivit, W. and Hammarström, S. Identification and quantitation of free ceramides in human platelets. J. Lipid Res. 13(4), 525-530 (1972).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY 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

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, 02/16/2024

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