# **PRODUCT** INFORMATION



C24 Ceramide-d<sub>7</sub> (d18:1-d<sub>7</sub>/24:0)

Item No. 22789

CAS Registry No.:	1840942-15-5		
Formal Name:	N-[(1S,2R,3E)-2-hydroxy-1-(hydroxymethyl)-3-		
	heptadecen-1-yl-d <sub>7</sub> ]-tetracosanamide		$\wedge \wedge \wedge$
Synonyms:	Cer(d18:1-d <sub>7</sub> /24:0), C24 Ceramide-d <sub>7</sub> ,		
	Ceramide-d <sub>7</sub> (d18:1-d <sub>7</sub> /24:0),		$\langle \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$
	N-lignoceroyl-D-erythro-Sphingosine-d <sub>7</sub>		o
MF:	C <sub>42</sub> H <sub>76</sub> D <sub>7</sub> NO <sub>3</sub>		H_N
FW:	657.2		
Chemical Purity:	≥95% (Lignoceric Ceramide)		ОН
Deuterium			і ОН
Incorporation:	≥99% deuterated forms (d₁-d⁊); ≤1% d₀		
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			

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## Laboratory Procedures

C24 Ceramide- $d_7$  (d18:1- $d_7/24:0$ ) is intended for use as an internal standard for the quantification of C24 Ceramide (Item No. 62535) 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 Ceramide- $d_7$  (d18:1- $d_7/24:0$ ) is supplied as a crystalline solid. A stock solution may be made by dissolving the C24 Ceramide- $d_7$  (d18:1- $d_7$ /24:0) in the solvent of choice. C24 Ceramide- $d_7$  (d18:1- $d_7$ /24:0) is soluble in the organic solvent dimethyl formamide (DMF), which should be purged with an inert gas, at a concentration of approximately 0.15 mg/ml.

## Description

C24 Ceramide-d<sub>7</sub> is one of the most abundant naturally occurring ceramides.<sup>1-3</sup>

## 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.

### 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

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## 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