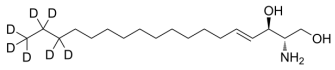
D-erythro-Sphingosine-d_7

Cat. No.:	HY-101047S
CAS No.:	1246304-34-6
Molecular Formula:	$C_{18}H_{30}D_7NO_2$
Molecular Weight:	306.54
Target:	PKC; Endogenous Metabolite; Phosphatase
Pathway:	Epigenetics; TGF-beta/Smad; Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description	D-erythro-Sphingosine-d_7 is the deuterium labeled D-erythro-Sphingosine. D-erythro-Sphingosine (Erythrosphingosine) is a very potent activator of p32-kinase with an EC50 of 8 μM, and inhibits protein kinase C (PKC). D-erythro-Sphingosine (Erythrosphingosine) is also a PP2A activator[1][2][3][4].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

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[3]. Khan WA, et al. Protein kinase C and platelet inhibition by D-erythro-Sphingosine: comparison with N,N-dimethylsphingosine and commercial preparation. Biochem Biophys Res Commun. 1990 Oct 30;172(2):683-91.

[4]. Pham VT, et al. A concise synthesis of a promising protein kinase C inhibitor: D-erythro-Sphingosine. Arch Pharm Res. 2007 Jan;30(1):22-7.

[5]. Cheng P, et al. Protein phosphatase 2A (PP2A) activation promotes axonal growth and recovery in the CNS. J Neurol Sci. 2015 Dec 15;359(1-2):48-56.

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