Bisdemethoxycurcumin-d_8

Cat. No.: HY-N0007S

CAS No.: 2470233-08-8

Molecular Formula: $C_{19}H_8D_8O_4$

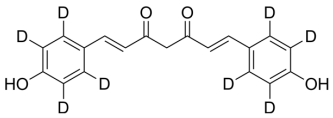
Molecular Weight: 316.38

Target: Apoptosis; Autophagy

Pathway: Apoptosis; Autophagy

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (316.08 mM)

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* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Mass / Solvent / Concentration	1 mg	5 mg	10 mg
1 mM	3.1608 mL	15.8038 mL	31.6076 mL
5 mM	0.6322 mL	3.1608 mL	6.3215 mL
10 mM	0.3161 mL	1.5804 mL	3.1608 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Bisdemethoxycurcumin-d_8 is the deuterium labeled Bisdemethoxycurcumin. Bisdemethoxycurcumin(Curcumin III; Didemethoxycurcumin) is a natural derivative of curcumin with anti-inflammatory and anti-cancer activities.

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.

[2]. Lee PJ, et al. Bisdemethoxycurcumin Induces Apoptosis in Activated Hepatic Stellate Cells via Cannabinoid Receptor 2. Molecules. 2015 Jan 14;20(1):1277-92.

[3]. Chen J, et al. Natural borneol enhances bisdemethoxycurcumin-induced cell cycle arrest in the G2/M phase through up-regulation of intracellular ROS in HepG2 cells. Food Funct. 2014 Dec 24.

[4]. Luo C, et al. Bisdemethoxycurcumin attenuates gastric adenocarcinoma growth by inducing mitochondrial dysfunction. Oncol Lett. 2015 Jan;9(1):270-274.

[5]. Li YB, et al. Bisdemethoxycurcumin Increases Sirt1 to Antagonize t-BHP-Induced Premature Senescence in WI38 Fibroblast Cells. Evid Based Complement Alternat Med. 2013;2013:851714.

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