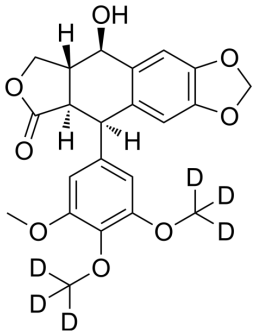
Podofilox-d_6

Cat. No.:	HY-15552S
Molecular Formula:	$C_{22}H_{16}D_6O_8$
Molecular Weight:	420.44
Target:	Microtubule/Tubulin
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Podofilox-d_6 is the deuterium labeled Podofilox. Podofilox (Podophyllotoxin) is a potent inhibitor of microtubule assembly and DNA topoisomerase II[1][2].
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]. Wang B, Chen L, Zhen H, et al. Proteomic changes induced by podophyllotoxin in human cervical carcinoma HeLa cells. Am J Chin Med. 2013;41(1):163-75.

[3]. Guerrero E, Abad A, Montenegro G, et al. Analgesic and anti-inflammatory activity of podophyllotoxin derivatives. Pharm Biol. 2013 Jan 31.

[4]. Li M, Zhou L, Yang D, et al. Biochemical composition and antioxidant capacity of extracts from Podophyllum hexandrum rhizome. BMC Complement Altern Med. 2012 Dec 22;12:263.

[5]. Prasad V, Chaudhuri AR, Curcio M, et al. Podophyllotoxin and nocodazole counter the effect of IKP104 on tubulin decay. J Protein Chem. 1998 Oct;17(7):663-8.

[6]. Podophyllotoxin

Caution: Product has not been fully validated for medical applications. For research use only.

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