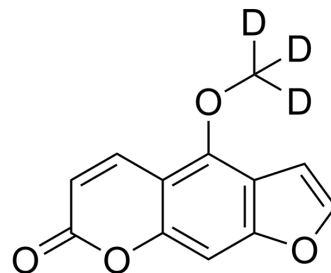


Bergapten-d₃

Cat. No.:	HY-N0370S
CAS No.:	2749409-59-2
Molecular Formula:	C ₁₂ H ₅ D ₃ O ₄
Molecular Weight:	219.21
Target:	Autophagy; Cytochrome P450; Isotope-Labeled Compounds
Pathway:	Autophagy; Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Bergapten-d ₃ is deuterium labeled Bergapten. Bergapten is a natural anti-inflammatory and anti-tumor agent. Bergapten is inhibitory towards mouse and human CYP isoforms.
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 YM, et al. Effects of 5-methoxypsoralen (5-MOP) on arylamine N-acetyltransferase activity in the stomach and colon of rats and human stomach and colon tumor cell lines. *In Vivo.* 2005 Nov-Dec;19(6):1061-9.
- [3]. Li XJ, et al. Bergapten exerts inhibitory effects on diabetes-related osteoporosis via the regulation of the PI3K/AKT, JNK/MAPK and NF-κB signaling pathways in osteoprotegerin knockout mice. *Int J Mol Med.* 2016 Dec;38(6):1661-1672.

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

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