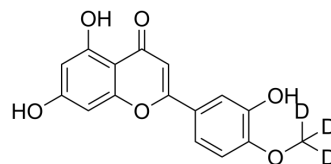


Diosmetin-d₃

Cat. No.:	HY-N0125S
CAS No.:	1189728-54-8
Molecular Formula:	C ₁₆ H ₉ D ₃ O ₆
Molecular Weight:	303.28
Target:	Cytochrome P450; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Diosmetin-d ₃ is the deuterium labeled Diosmetin. Diosmetin is a natural flavonoid which inhibits human CYP1A enzyme activity with an IC ₅₀ of 40 μM in HepG2 cell.
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]. Liu B, et al. Diosmetin induces apoptosis by upregulating p53 via the TGF-β signal pathway in HepG2 hepatoma cells. *Mol Med Rep*. 2016 Jul;14(1):159-64.
- [3]. Yu G, et al. Diosmetin ameliorates the severity of cerulein-induced acute pancreatitis in mice by inhibiting the activation of the nuclear factor-κB. *Int J Clin Exp Pathol*. 2014 Apr 15;7(5):2133-42.

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

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