Product Data Sheet



Myricetin-¹³C₃

Cat. No.: Molecular Formula: Molecular Weight: Target: Pathway: Storage:	HY-15097S $C_{12}{}^{13}C_{3}H_{10}O_{8}$ 321.21 Apoptosis; Autophagy; Endogenous Metabolite; Isotope-Labeled Compounds Apoptosis; Autophagy; Metabolic Enzyme/Protease; Others Please store the product under the recommended conditions in the Certificate of Analysis.	НО
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BIOLOGICAL ACTIVITY		
Description	Myricetin- ¹³ C ₃ is the ¹³ C-labeled Myricetin. Myricetin is a common plant-derived flavonoid with a wide range of activities including strong anti-oxidant, anticancer, antidiabetic and anti-inflammatory 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]. Semwal DK, et al. Myricetin: A Dietary Molecule with Diverse Biological Activities. Nutrients. 2016 Feb 16;8(2):90.

[3]. Phillips PA, et al. Myricetin induces pancreatic cancer cell death via the induction of apoptosis and inhibition of thephosphatidylinositol 3-kinase (PI3K) signaling pathway. Cancer Lett. 2011 Sep 28;308(2):181-8.

[4]. Xu Y, et al. Myricetin induces apoptosis via endoplasmic reticulum stress and DNA double-strand breaks in human ovarian cancer cells. Mol Med Rep. 2016 Mar;13(3):2094-100.

[5]. Jinwal UK, et al. Chemical Manipulation of Hsp70 ATPase Activity Regulates Tau Stability. J Neurosci. 2009 Sep 30;29(39):12079-88.

[6]. Tzeng SH, et al. Inhibition of platelet aggregation by some flavonoids. Thromb Res. 1991 Oct 1;64(1):91-100.

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

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