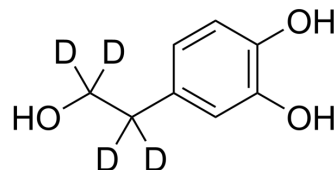


Hydroxytyrosol-d₄

Cat. No.:	HY-N0570S
CAS No.:	1330260-89-3
Molecular Formula:	C ₈ H ₆ D ₄ O ₃
Molecular Weight:	158.19
Target:	Fungal; Bacterial; Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Anti-infection; Metabolic Enzyme/Protease; Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 100 mg/mL (632.15 mM; Need ultrasonic)
 H₂O : 100 mg/mL (632.15 mM; Need ultrasonic)
 Ethanol : 50 mg/mL (316.08 mM; Need ultrasonic)
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Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
	1 mM		6.3215 mL	31.6076 mL	63.2151 mL
	5 mM		1.2643 mL	6.3215 mL	12.6430 mL
	10 mM		0.6322 mL	3.1608 mL	6.3215 mL

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

BIOLOGICAL ACTIVITY

Description

Hydroxytyrosol-d₄ is the deuterium labeled Hydroxytyrosol. Hydroxytyrosol (DOPET) is a phenolic compound drawn from the olive tree and its leaves with anti-oxidant, anti-atherogenic, anti-thrombotic, antimicrobial, anti-inflammatory and anti-tumour effects[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]. Vilaplana-Pérez C, et al. Hydroxytyrosol and potential uses in cardiovascular diseases, cancer, and AIDS. *Front Nutr.* 2014 Oct 27;1:18.

[3]. Martínez L, et al. Hydroxytyrosol: Health Benefits and Use as Functional Ingredient in Meat. *Medicines (Basel).* 2018 Jan 23;5(1).

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

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