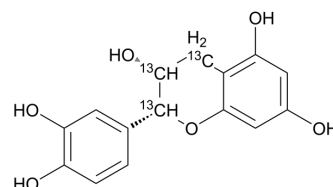


(±)-Epicatechin-¹³C₃

Cat. No.:	HY-N0001S
CAS No.:	1217780-28-3
Molecular Formula:	C ₁₂ ¹³ C ₃ H ₁₄ O ₆
Molecular Weight:	293.25
Target:	COX; Endogenous Metabolite; Ferroptosis; Isotope-Labeled Compounds
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; Apoptosis; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	(±)-Epicatechin- ¹³ C ₃ is the ¹³ C labeled (±)-Epicatechin. (-)-Epicatechin (HY-N0001) inhibits cyclooxygenase-1 (COX-1) with an IC50 of 3.2 μM. (-)-Epicatechin inhibits the IL-1β-induced expression of iNOS by blocking the nuclear localization of the p65 subunit of NF-κB[1].
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

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- [2]. Waffo-Téguo P, et al. Potential cancer-chemopreventive activities of wine stilbenoids and flavans extracted from grape (*Vitis vinifera*) cell cultures. *Nutr Cancer.* 2001;40(2):173-9.
- [3]. Shay J, et al. Molecular Mechanisms and Therapeutic Effects of (-)-Epicatechin and Other Polyphenols in Cancer, Inflammation, Diabetes, and Neurodegeneration. *Oxid Med Cell Longev.* 2015;2015:181260.
- [4]. Nogueira L, et al. (-)-Epicatechin enhances fatigue resistance and oxidative capacity in mouse muscle. *J Physiol.* 2011 Sep 15;589(Pt 18):4615-31.

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

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