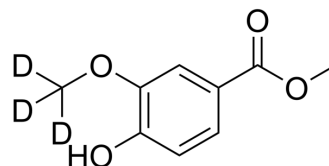


Methyl vanillate-d₃

Cat. No.:	HY-75342S
CAS No.:	1394230-40-0
Molecular Formula:	C ₉ H ₇ D ₃ O ₄
Molecular Weight:	185.19
Target:	Wnt; Endogenous Metabolite; Reactive Oxygen Species; Isotope-Labeled Compounds
Pathway:	Stem Cell/Wnt; Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Methyl vanillate-d ₃ is deuterated labeled β-Phellandrene (HY-N8573). β-Phellandrene is obtained from Carum petroselinum. β-Phellandrene can be used to essential oil additives ^[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] . Methyl vanillate (0-100 μM) increases the expression and nuclear translocation of β-catenin in calvarial osteoblasts. Methyl vanillate dose-dependently elevates ALP activity in calvarial osteoblasts ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Cha PH, et al. Hovenia dulcis Thunb extract and its ingredient methyl vanillate activate Wnt/β-catenin pathway and increase bone mass in growing or ovariectomized mice. PLoS One. 2014 Jan 22;9(1):e85546.
- [2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA