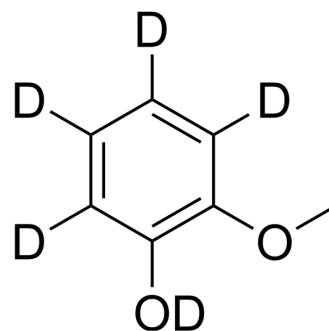


Guaiacol-d₄-1

Cat. No.:	HY-N1380S4
CAS No.:	20189-11-1
Molecular Formula:	C ₇ H ₃ D ₅ O ₂
Molecular Weight:	129.17
Target:	COX; NF-κB; Endogenous Metabolite
Pathway:	Immunology/Inflammation; NF-κB; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Guaiacol-d ₄ -1 is the deuterium labeled Guaiacol[1]. Guaiacol, a phenolic compound, inhibits LPS-stimulated COX-2 expression and NF-κB activation[1]. Anti-inflammatory activity[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 Feb;53(2):211-216.
- [2]. Murakami Y, et al. Re-evaluation of cyclooxygenase-2-inhibiting activity of vanillin and Guaiacol in macrophages stimulated with lipopolysaccharide. *Anticancer Res*. 2007 Mar-Apr;27(2):801-7.

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

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