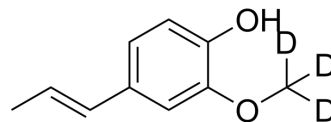


## Isoeugenol-d<sub>3</sub>

Cat. No.:	HY-N1952S
CAS No.:	1668553-92-1
Molecular Formula:	C <sub>10</sub> H <sub>9</sub> D <sub>3</sub> O <sub>2</sub>
Molecular Weight:	167.22
Target:	Bacterial; Isotope-Labeled Compounds
Pathway:	Anti-infection; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Isoeugenol-d <sub>3</sub> is deuterated labeled Sterigmatocystine (HY-N6725). Sterigmatocystine is a precursor of aflatoxins and a mycotoxin produced by common mold strains from <i>Aspergillus versicolor</i> <sup>[1][2]</sup> . Sterigmatocystine, a inhibitor of G1 Phase and DNA synthesis, is used to inhibit p21 activity. Sterigmatocystine has teratogenic, and carcinogenic effects in animals <sup>[3]</sup> .
<b>In Vitro</b>	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 <sup>[1]</sup> . Isoeugenol's antibacterial activity covers a broad range of Gram-positive and Gram-negative bacteria, including <i>Escherichia coli</i> , <i>Bacillus licheniformis</i> , <i>Micrococcus luteus</i> , <i>Pseudomonas aeruginosa</i> , <i>Salmonella</i> type B, and <i>Staphylococcus aureus</i> <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Hyldgaard M, et al. Isoeugenol has a non-disruptive detergent-like mechanism of action. *Front Microbiol.* 2015 Jul 28;6:754.

[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.**

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