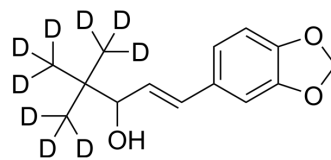


Stiripentol-d₉

Cat. No.:	HY-103392S
CAS No.:	1185239-64-8
Molecular Formula:	C ₁₄ H ₉ D ₉ O ₃
Molecular Weight:	243.35
Target:	Cytochrome P450; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Stiripentol-d ₉ is the deuterium labeled Stiripentol. Stiripentol (STP) is an anticonvulsant agent, which can inhibit N-demethylation of CLB to NCLB mediated by CYP3A4 (noncompetitively) and CYP2C19 (competitively) with Ki of 1.59±0.07 and 0.516±0.065 μM and IC50 of 1.58 and 3.29 μM, respectively[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]. Giraud C, et al. In vitro and in vivo inhibitory effect of stiripentol on clobazam metabolism. *Drug Metab Dispos*. 2006 Apr;34(4):608-11. Epub 2006 Jan 13.
- [3]. Cao D, et al. Efficacy of stiripentol in hyperthermia-induced seizures in a mouse model of Dravet syndrome. *Epilepsia*. 2012 Jul;53(7):1140-5.

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

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