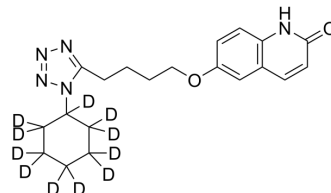


3,4-Dehydro Cilostazol-d₁₁

Cat. No.:	HY-135910S
CAS No.:	1073608-13-5
Molecular Formula:	C ₂₀ H ₁₄ D ₁₁ N ₅ O ₂
Molecular Weight:	378.51
Target:	Drug Metabolite; 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	3,4-Dehydro Cilostazol-d ₁₁ is deuterated labeled 3,4-Dehydro Cilostazol (HY-135910). 3,4-Dehydro Cilostazol (OPC-13015) is an active metabolite of Cilostazol (CLZ; HY-17464). 3,4-Dehydro Cilostazol is used for pharmacokinetic study ^[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.
In Vivo	3,4-Dehydro Cilostazol (OPC-13015; Oral; 1 mg/kg GLZ and 10 mg/kg CLZ) has a T _{1/2} of 3.94 hours, a C _{max} of 1.39 μM and an AUC ₀₋₂₄ of 4.69 μg ² h/ml. The plasma concentration time profiles of GLZ, CLZ & its active metabolite DCLZ are traceable up to 24 h, 12 h and 12 h respectively by oral administration at 1 mg/kg dose of GLZ and 10 mg/kg CLZ ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. T R S Satheeshmanikandan, et al. Liquid Chromatography - Tandem Mass Spectrometry for the Simultaneous Quantitation of Glipizide, Cilostazol and Its Active Metabolite 3, 4-dehydro-cilostazol in Rat Plasma: Application for a Pharmacokinetic Study. *Arzneimittelforschung*. 2012 Sep;62(9):425-32.
- [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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