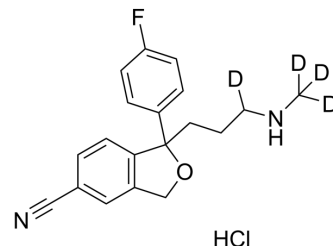


Desmethylcitalopram-d₄ hydrochloride

Cat. No.:	HY-113739S1
Molecular Formula:	C ₁₉ H ₁₆ D ₄ ClFN ₂ O
Molecular Weight:	350.85
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	Desmethylcitalopram-d ₄ hydrochloride is deuterated labeled Desmethylcitalopram hydrochloride (HY-113739). Desmethylcitalopram (DCIT) hydrochloride is the active metabolite of Citalopram (HY-121203). Desmethylcitalopram has antidepressant effects. Desmethylcitalopram also inhibits cytochrome P450-2D6, -2C19 with IC ₅₀ s of 39.5 and 53.5 μM ^[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.

REFERENCES

- [1]. von Moltke LL, et al. Citalopram and desmethylcitalopram in vitro: human cytochromes mediating transformation, and cytochrome inhibitory effects. *Biol Psychiatry*. 1999 Sep 15;46(6):839-49.
- [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