Product Data Sheet

Maprotiline-d5 hydrochloride

Cat. No.: HY-B0444S
CAS No.: 1794942-12-3

Molecular Formula: C₂₀H₁₉D₅ClN

Molecular Weight: 318.9

Target: Autophagy
Pathway: Autophagy

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Maprotiline-d5 hydrochloride is the deuterium labeled Maprotiline hydrochloride. Maprotiline hydrochloride is a selective noradrenalin re-uptake inhibitor and a tetracyclic antidepressant $^{[1][2]}$.
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]. Peng, W.H., et al., Berberine produces antidepressant-like effects in the forced swim test and in the tail suspension test in mice. Life Sci, 2007. 81(11): p. 933-8.

[3]. http://en.wikipedia.org/wiki/Maprotiline

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