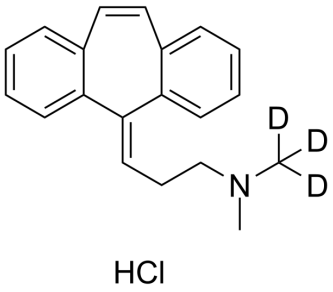
Cyclobenzaprine-d3 hydrochloride

Cat. No.:	HY-B0740S
CAS No.:	1184983-42-3
Molecular Formula:	$C_{20}H_{19}D_3ClN$
Molecular Weight:	314.87
Target:	5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Cyclobenzaprine-d3 (MK130-d3) hydrochloride is the deuterium labeled Cyclobenzaprine hydrochloride. Cyclobenzaprine hydrochloride (MK130 hydrochloride) is a skeletal muscle relaxant and a central nervous system (CNS) depressant.
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]. Kobayashi, H., Y. Hasegawa, and H. Ono, Cyclobenzaprine, a centrally acting muscle relaxant, acts on descending serotonergic systems. Eur J Pharmacol, 1996. 311(1): p. 29-35.

[3]. Honda, M., T. Nishida, and H. Ono, Tricyclic analogs cyclobenzaprine, amitriptyline and cyproheptadine inhibit the spinal reflex transmission through 5-HT(2) receptors. Eur J Pharmacol, 2003. 458(1-2): p. 91-9.

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