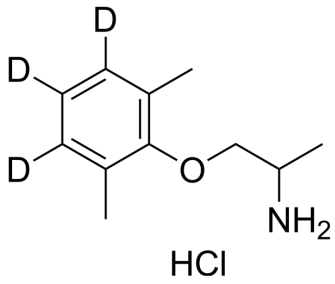
Mexiletine-d_3 hydrochloride

Cat. No.:	HY-A0093S1
Molecular Formula:	$C_{11}H_{15}D_3ClNO$
Molecular Weight:	218.74
Target:	Sodium Channel; Isotope-Labeled Compounds
Pathway:	Membrane Transporter/Ion Channel; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Mexiletine-d_3 (hydrochloride) is deuterium labeled Mexiletine (hydrochloride). Mexiletine hydrochloride (KOE-1173 hydrochloride), a Class IB antianhythmic, is a non-selective voltage-gated sodium channel blocker[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]. Desaphy JF, et al. Effect of mexiletine on sea anemone toxin-induced non-inactivating sodium channels of rat skeletal muscle: a model of sodium channel myotonia. Neuromuscul Disord. 1999 May;9(3):182-9.

[3]. Mori K, et al. Inhibitory effects of class I and IV antiarrhythmic drugs on the Na+-activated K+ channel current in guinea pig ventricular cells. Naunyn Schmiedebergs Arch Pharmacol. 1998 Dec;358(6):641-8.

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