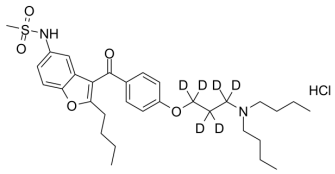
Dronedarone D6 hydrochloride

Cat. No.:	HY-A0016S
CAS No.:	1329809-23-5
Molecular Formula:	$C_{31}H_{39}D_6ClN_2O_5S$
Molecular Weight:	599.25
Target:	mAChR; Sodium Channel; Calcium Channel; Adrenergic Receptor; Cytochrome P450; Autophagy
Pathway:	GPCR/G Protein; Neuronal Signaling; Membrane Transporter/Ion Channel; Metabolic Enzyme/Protease; Autophagy
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Dronedarone D6 hydrochloride is the deuterium labeled Dronedarone. Dronedarone hydrochloride, a derivative of Amiodarone (HY-14187), is a class III antiarrhythmic agent for the study of atrial fibrillation (AF) and atrial flutter. Dronedarone hydrochloride is a potent blocker of multiple ion currents, including potassium current, sodium current, and L-type calcium current, and exhibits antiadrenergic effects by noncompetitive binding to β-adrenergic receptors. Dronedarone hydrochloride is a substrate for and a moderate inhibitor of CYP3A4[1][2][3][4].
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]. Chinmay Patel, et al. Dronedarone. Circulation. 2009 Aug 18;120(7):636-44.

[3]. Katarzyna M Sawicka, et al. Influence of dronedarone (a class III antiarrhythmic drug) on the anticonvulsant potency of four classical antiepileptic drugs in the tonic-clonic seizure model in mice. J Neural Transm (Vienna). 2019 Feb;126(2):115-122.

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