Benzethonium-d_7 chloride

Cat. No.: HY-B0942S

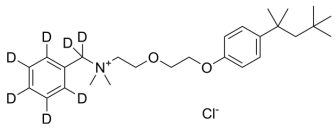
Molecular Formula: $C_{27}H_{35}D_7ClNO_2$

Molecular Weight: 455.12

Target: nAChR; Isotope-Labeled Compounds

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling; Others

Storage: 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (219.72 mM; Need ultrasonic)
DMSO : 33.33 mg/mL (73.23 mM; Need ultrasonic)
H2O : 20 mg/mL (43.94 mM; Need ultrasonic)

Preparing Stock Solutions

Mass / Solvent / Concentration	1 mg	5 mg	10 mg
1 mM	2.1972 mL	10.9861 mL	21.9722 mL
5 mM	0.4394 mL	2.1972 mL	4.3944 mL
10 mM	0.2197 mL	1.0986 mL	2.1972 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Benzethonium-d7 chloride is the deuterium labeled Benzethonium chloride. Benzethonium chloride inhibit human recombinant α7 and α4β2 neuronal nicotinic acetylcholine receptors in Xenopus oocytes.

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.

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