Product Data Sheet

Isoxsuprine-d₆ hydrochloride

Molecular Weight: 343.88

Target: Adrenergic Receptor; iGluR; Isotope-Labeled Compounds

Pathway: GPCR/G Protein; Neuronal Signaling; Membrane Transporter/Ion Channel; Others

Storage: 4°C, sealed storage, away from moisture

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

BIOLOGICAL ACTIVITY

Description	Isoxsuprine-d $_6$ (hydrochloride) is the deuterium labeled Isoxsuprine hydrochloride. Isoxsuprine hydrochloride is a beta-adrenergic receptor agonist with Kis of 13.65 μ M and 3.48 μ M for myometrial and placental beta-adrenergic receptor, respectively. Isoxsuprine hydrochloride is also a NMDA receptor antagonist.
IC ₅₀ & Target	NMDA Receptor
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]. Falkay G, et al. Affinity of tocolytic agents on human placental and myometrial beta-adrenergic receptors. J Perinat Med. 1986;14(2):109-13.

[3]. Kretschy N, et al. In vitro inhibition of breast cancer spheroid-induced lymphendothelial defects resembling intravasation into the lymphatic vasculature by acetohexamide, isoxsuprine, nifedipin and proadifen. Br J Cancer. 2013 Feb 19;108(3):570-8.

[4]. Hill JW, et al. Identification of isoxsuprine hydrochloride as a neuroprotectant in ischemic stroke through cell-based high-throughput screening. PLoS One. 2014 May 7;9(5):e96761.

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