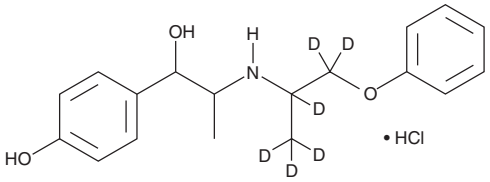
PRODUCT INFORMATION

Isoxsuprine-d_6 (hydrochloride)

Item No. 27847

CAS Registry No.: 2706004-35-3
Formal Name: 4-(1-hydroxy-2-((1-phenoxypropan-2-yl-1,1,2,3,3,3-d_6)amino)propyl)phenol, monohydrochloride
MF: $C_{18}H_{17}D_6NO_3 \bullet HCl$
FW: 343.9
Chemical Purity: ≥98% (Isoxsuprine)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_6); ≤1% d_0
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Isoxsuprine-d_6 (hydrochloride) is intended for use as an internal standard for the quantification of isoxsuprine (Item No. 20688) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Isoxsuprine-d_6 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the isoxsuprine-d_6 (hydrochloride) in the solvent of choice. Isoxsuprine-d_6 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of isoxsuprine-d_6 (hydrochloride) in these solvents is approximately 0.1, 5, and 10 mg/ml, respectively.

Description

Isoxsuprine is an adrenergic receptor modulator that has α-adrenergic receptor (α-AR) antagonist and β-AR agonist properties.[1,2] It induces vasodilation of isolated equine common digital artery strips precontracted with norepinephrine, indicating an α-AR effect, and induces relaxation of isolated fowl cecum, an effect that can be blocked by the β-AR antagonist propranolol (Item Nos. 23349 | 17291).[2,3] Isoxsuprine has antinociceptive effects in an acetic acid writhing test in mice.[4] It also inhibits oxytocin-induced contractions in isolated rat uterus (IC_{50} = 9.15 µM).[5] It delays labor onset in rats by 31.63 hours when administered at a dose of 10 mg/kg per day on days 13 to 21 of gestation but increases heart rate with increasing concentration.

References

1. Cook, P. and James, I. *N. Engl. J. Med.* **305(26)**, 1560-1564 (1981).
2. Belloli, C., Carcano, R., Arioli, F., *et al. Equine Vet. J.* **32(2)**, 119-124 (2000).
3. Ekert, R.S. and Macallister, C.G. *J. Vet. Pharmacol. Ther.* **25(2)**, 81-87 (2002).
4. Bentley, G.A. and Starr, J. *Br. J. Pharmacol.* **88(3)**, 515-521 (1988).
5. Viswanathan, C.L., Kodgule, M.M., and Chaudhari, A.S. *Bioorg. Med. Chem. Lett.* **15(15)**, 3532-3535 (2005).

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