PRODUCT INFORMATION



lsoxsuprine-d₆ (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:	$C_{18}H_{17}D_6NO_3 \bullet HCI$
FW:	343.9
Chemical Purity:	≥98% (Isoxsuprine)
Deuterium	•HCI
Incorporation:	\geq 99% deuterated forms (d ₁ -d ₆); \leq 1% d ₀ HO ²
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-d₆ (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-d₆ (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the isoxsuprine-d₆ (hydrochloride) in the solvent of choice. Isoxsuprine-d₆ (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-d₆ (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 (IC₅₀ = 9.15 μ M).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).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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