

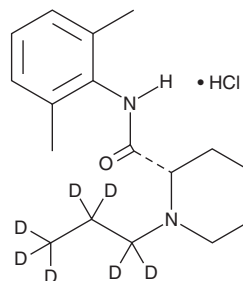
PRODUCT INFORMATION



(-)-Ropivacaine-d₇ (hydrochloride)

Item No. 26495

CAS Registry No.: 1217667-10-1
Formal Name: (S)-N-(2,6-dimethylphenyl)-1-(propyl-d₇)piperidine-2-carboxamide, monohydrochloride
Synonym: (S)-Ropivacaine-d₇
MF: C₁₇H₁₉D₇N₂O • HCl
FW: 317.9
Chemical Purity: ≥98% ((-)-Ropivacaine)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₇); ≤1% d₀
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

(-)-Ropivacaine-d₇ (hydrochloride) is intended for use as an internal standard for the quantification of (-)-ropivacaine (Item No. 21422) 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).

(-)-Ropivacaine-d₇ (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the (-)-ropivacaine-d₇ (hydrochloride) in the solvent of choice, which should be purged with an inert gas. (-)-Ropivacaine-d₇ (hydrochloride) is soluble in the organic solvent methanol.

Description

(-)-Ropivacaine is a potent and reversible blocker of sodium channels in nerve fibers.¹ *In vivo*, (-)-ropivacaine induces complete impairment of proprioception, motor function, and nociception in the hindleg of rats when 100 μL of an 8 mM solution is injected percutaneously into the sciatic nerve.² (-)-Ropivacaine depresses myocardial contractile force in isolated rat hearts less potently than (±)-ropivacaine, as well as (-)- and (±)-bupivacaine (Item No. 16618).³ Formulations containing (-)-ropivacaine have been used as local anesthetics during surgery and childbirth.

References

1. Hansen, T.G. Ropivacaine: A pharmacological review. *Exp. Rev. Neurother.* **4(5)**, 781-791 (2004).
2. Sinnott, C.J. and Strichartz, G.R. Levobupivacaine versus ropivacaine for sciatic nerve block in the rat. *Reg. Anesth. Pain Med.* **28(4)**, 294-303 (2003).
3. Pinotti, M.F., Hepner, A., Campos, D.H., et al. Myocardial contractility impairment with racemic bupivacaine, non-racemic bupivacaine and ropivacaine. A comparative study. *Acta Cir. Bras.* **30(7)**, 484-490 (2015).

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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