

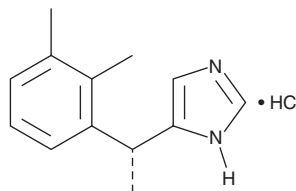
PRODUCT INFORMATION



Levomedetomidine (hydrochloride)

Item No. 35201

CAS Registry No.: 190000-46-5
Formal Name: 5-[(1R)-1-(2,3-dimethylphenyl)ethyl]-1H-imidazole, monohydrochloride
Synonym: (R)-Medetomidine
MF: C₁₃H₁₆N₂ • HCl
FW: 236.7
Purity: ≥98%
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

Levomedetomidine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the levomedetomidine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Levomedetomidine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of levomedetomidine (hydrochloride) in ethanol and DMSO is approximately 10 mg/ml and approximately 20 mg/ml in DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of levomedetomidine (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of levomedetomidine (hydrochloride) in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Levomedetomidine is the levorotary enantiomer of the racemic α_2 -adrenergic receptor (α_2 -AR) agonist medetomidine.¹ Unlike medetomidine or the dextrorotary enantiomer dexmedetomidine (Item No. 15581), levomedetomidine does not induce sedation or analgesia when administered alone in dogs.² However, levomedetomidine does reduce the level of dexmedetomidine-induced sedation in dogs. Formulations containing levomedetomidine have been used as anesthetics.

References

1. Flaherty, D. Alpha₂-adrenoceptor agonists in small animal practice 1. Why they do what they do. *In Practice* **35(9)**, 524-530 (2013).
2. Kuusela, E., Vainio, O., Kaistinen, A., *et al.* Sedative, analgesic, and cardiovascular effects of levomedetomidine alone and in combination with dexmedetomidine in dogs. *Am. J. Vet. Res.* **62(4)**, 616-621 (2001).

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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