

PRODUCT INFORMATION

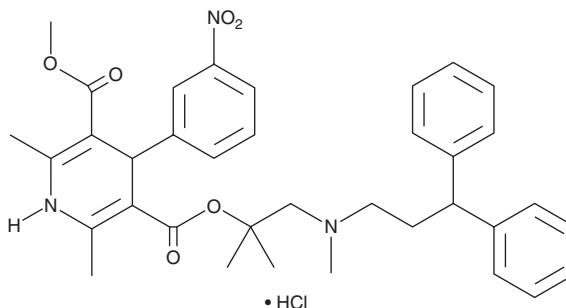


Lercanidipine (hydrochloride)

Item No. 29104

CAS Registry No.: 132866-11-6
Formal Name: 3,5-pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3-[2-[(3,3-diphenylpropyl)methylamino]-1,1-dimethylethyl] 5-methyl ester, monohydrochloride

MF: C₃₆H₄₁N₃O₆ • HCl
FW: 648.2
Purity: ≥98%
UV/Vis.: λ_{max}: 239, 363 nm
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

Lercanidipine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the lercanidipine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Lercanidipine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of lercanidipine (hydrochloride) in these solvents is approximately 2, 15, and 25 mg/ml, respectively.

Lercanidipine (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, lercanidipine (hydrochloride) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Lercanidipine (hydrochloride) has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Lercanidipine is a dihydropyridine L-type calcium channel blocker.¹ It binds to rat brain and heart homogenates (K_is = 0.24-0.3 and 0.22 nM, respectively, in radioligand binding assays) and inhibits potassium-induced contraction of isolated rat aorta (IC₅₀ = 1.3 nM). Lercanidipine reduces diastolic blood pressure (DBP) in normotensive and spontaneously hypertensive rats with ED₂₅ values of 16.3 and 15.5 μg/kg, respectively. Formulations containing lercanidipine have been used in the treatment of hypertension.

Reference

1. Testa, R., Leonardi, A., Tajana, A., *et al.* Lercanidipine (Rec 15/2375): A novel 1,4-dihydropyridine calcium antagonist for hypertension *Cardiovasc. Drug Rev.* **15**(3), 187-219 (1997).

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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