PRODUCT INFORMATION



Labetalol (hydrochloride)

Item No. 20249

CAS Registry No.: 32780-64-6

Formal Name: 2-hydroxy-5-[1-hydroxy-2-[(1-

methyl-3-phenylpropyl)aminolethyll-

benzamide, monohydrochloride

Synonyms: AH 5158A, Normodyne, NSC 290312,

SCH 15719W, Trandate

MF: C₁₉H₂₄N₂O₃ • HCl

FW: 364.9 **Purity:** ≥98%

 λ_{max} : 208, 303 nm UV/Vis.: A crystalline solid Supplied as: Room temperature Storage:

≥4 years Stability:

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

Laboratory Procedures

Labetalol (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the labetalol (hydrochloride) in the solvent of choice. Labetalol (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of labetalol (hydrochloride) in these solvents is approximately 0.3, 15, and 30 mg/ml, respectively.

Labetalol (hydrochloride) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Labetalol is a competitive antagonist of both α - and β -adrenoreceptors that is effective at nanomolar concentrations.^{1,2} It is reported to control hypertension.^{3,4}

References

- 1. Brittain, R. T. and Levy, G. P. A review of the animal pharmacology of labetalol, a combined α- and B-adrenoceptor-blocking drug. Br. J. Clin. Pharmacol. 3(4 suppl 3), 681-684 (1976).
- 2. Richards, D. A. Pharmacological effects of labetalol in man. Br. J. Clin. Pharmacol. 3(4 suppl 3), 721-723 (1976).
- 3. Owens, W. B. Blood pressure control in acute cerebrovascular disease. J. Clin. Hypertens. (Greenwich) **13(3)**, 205-211 (2011).
- 4. Kernaghan, D., et al. Hypertension in pregnancy: A review of therapeutic options. Obstet. Med. 5(2), 44-49 (2012).

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

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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