

Certificate of Analysis

Print Date: Dec 12th 2017

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Product Name: (R)-(+)-Propranolol hydrochloride Catalog No.: 0835 Batch No.: 1

CAS Number: 13071-11-9 EC Number: 225-749-2

IUPAC Name: (R)-(+)-1-[(1-methylethyl)amino]-3-(1-naphthalenyloxy)-2-propanol hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₂₁NO₂.HCI

Batch Molecular Weight: 295.81 **Physical Appearance:** White solid

Solubility: water to 100 mM Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: R_f = 0.8 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

Melting Point: At 194°C

¹H NMR: Consistent with structure

Optical Rotation: $[\alpha]_D$ = +23.6 (Concentration = 1, Solvent = Ethanol)

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 64.97 7.73 4.64 Found 65.38 7.73 4.64

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Product Information

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Description:

Less active enantiomer of the β -adrenoceptor antagonist propranolol. Racemate, S-enantiomer and Glycol Metabolite also available.

Physical and Chemical Properties:

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Batch Molecular Weight: 295.81 Physical Appearance: White solid

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

water to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

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Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Barrett *et al* (1968) The biological properties of the optical isomers of propranolol and their effects on cardiac arrhythmias. Br.J.Pharmacol. *34* 43. PMID: 19108278.

Bond *et al* (1967) Metabolism of propranolol (Inderal) a potent, specific β-adrenergic receptor blocking agent. Nature *213* 721. PMID: 6031788.