# **PRODUCT** INFORMATION



## Levobunolol (hydrochloride)

Item No. 21005

CAS Registry No.:	27912-14-7	
Formal Name:	5-[(2S)-3-[(1,1-dimethylethyl)amino]-	$\setminus$ /
	2-hydroxypropoxy]-3,4-dihydro-1(2H)- naphthalenone, monohydrochloride	o N
Synonyms:	AG-901, (-)-Bunolol, W-7000A	ÓH H
MF:	$C_{17}H_{25}NO_3 \bullet HCI$	
FW:	327.9	• HCI
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 222, 254, 312 nm	$\parallel$ $\checkmark$
Supplied as:	A crystalline solid	0
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Patch specific analytical results are provided on each certificate of analysis		

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#### Laboratory Procedures

Levobunolol (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the levobunolol (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Levobunolol (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of levobunolol (hydrochloride) in these solvents is approximately 11, 16, and 14 mg/ml, respectively.

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 levobunolol (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of levobunolol (hydrochloride) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

Levobunolol (hydrochloride) is a  $\beta$ -adrenergic antagonist that acts as a vasodilator and increases ocular circulation when applied in solution to the eye.<sup>1</sup> Topical formulations containing levobunolol are used to manage glaucoma.<sup>2</sup>

#### References

- 1. Tierney, D.W. Betaxolol and levobunolol: New beta-blocking antiglaucoma agents. J. Am. Optom. Assoc. 58(9), 722-727 (1987).
- 2. Morsman, C.D., Bosem, M.E., Lusky, M., et al. The effect of topical beta-adrenoceptor blocking agents on pulsatile ocular blood flow. Eye (Lond) 9(Pt 3), 344-347 (1995).

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

#### SAFFTY 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.

#### WARRANTY AND LIMITATION OF REMEDY

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