



CERTIFICATE OF ANALYSIS

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1. Identification

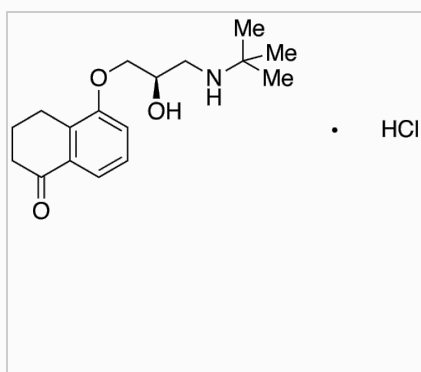
Catalogue Number: L335010

CAS Number: 27867-05-6

Product: ent-Levobunolol Hydrochloride (R-Bunolol Hydrochloride)

Synonym: 5-[(2R)-3-[(1,1-Dimethylethyl)amino]-2-hydroxypropoxy]-3,4-dihydro-1(2H)-naphthalenone Hydrochloride; (R)-5-[3-(tert-Butylamino)-2-hydroxypropoxy]-3,4-dihydro-1(2H)-naphthalenone Hydrochloride; (+)-Bunolol Hydrochloride; d-Bunolol Hydrochloride;

Structure:



Molecular Formula:

C₁₇H₂₆ClNO₃

Molecular weight:

327.85

Source of Product:

Synthetic

Solubility:

DMSO (Slightly), Methanol (Slightly)

Lot Number: 8-ZCA-60-9

Purity: 98%

Shipping Condition: This Product Is Stable To Be Shipped At Room Temperature

Storage Condition: -20°C

2. Warning

Warning 1: Not Determined

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	White to Off-White Solid (cat.)	Off-White Solid
NMR	Conforms to Structure	Conforms
Elemental Analysis	%C: 62.28, %H: 7.99, %N: 4.27 (Theoretical)	%C: 62.04, %H: 7.87, %N: 4.25 (Measured)
MS	Conforms to Structure	Conforms
Chloride Content	Report Result	10.79% by Ion Chromatography
Specific Rotation	Report Result	+18.4° (c = 0.5, Methanol)

Additional Information: NA

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 2%. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Xhoana Gjergji	Philip Chan	Kevin Saldanha	5/21/2019	5/19/2029

KMS

