

Product Name: *nor*-Binaltorphimine dihydrochloride

Catalog No.: 0347

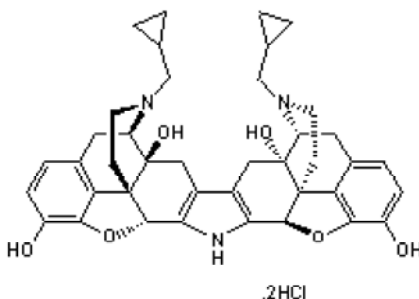
Batch No.: 4

CAS Number: 113158-34-2

IUPAC Name: 17,17'-(Dicyclopropylmethyl)-6,6',7,7'-6,6'-imino- 7,7'-binorphinan-3,4',14,14'-tetrol dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₈H₃₇N₃O₆.2HCl.2H₂O
Batch Molecular Weight: 770.75
Physical Appearance: Light cream solid
Solubility: water to 25 mM with gentle warming
 phosphate buffered saline to 50 mM with gentle warming
 DMSO to 25 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.35 (Dichloromethane:Methanol:Ammonia soln. [9:1:0.1])
Melting Point: Greater than 245°C(Dec)
¹H NMR: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen	
Theoretical	62.33	6.41	5.45	0 0 0
Found	62.76	6.53	5.42	0 0 0

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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IUPAC Name: 17,17'-(Dicyclopropylmethyl)-6,6',7,7'-6,6'-imino-7,7'-binorphinan-3,4',14,14'-tetrol dihydrochloride

Description:

A selective κ -opioid receptor antagonist.

Physical and Chemical Properties:

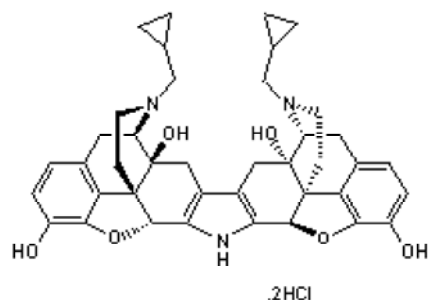
Batch Molecular Formula: C₃₈H₃₇N₃O₆.2HCl.2H₂O

Batch Molecular Weight: 770.75

Physical Appearance: Light cream solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

water to 25 mM with gentle warming

phosphate buffered saline to 50 mM with gentle warming

DMSO to 25 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).

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.

Licensing Information:

Sold with the permission of the University of Minnesota

References:

Blake et al (1997) Differential agonist regulation of the human κ -opioid receptor. *J.Neurochem.* **68** 1846. PMID: 9109509.

Feng et al (1997) Nor-binaltorphimine precipitates withdrawal and excitatory amino acid release in the locus ceruleus of butorphanol- but not morphine-dependent rats. *J.Pharmacol.Exp.Ther.* **283** 932. PMID: 9353416.

Portoghese et al (1994) Structure-activity relationship of N17'-substituted norbinaltorphimine congeners. Role of the N17'-basic group in the interaction with a putative address subsite on the κ opioid receptor. *J.Med.Chem.* **37** 1495. PMID: 8182708.

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