

Product Name: Nalmefene hydrochloride

Catalog No.: 4085

Batch No.: 2

CAS Number: 58895-64-0

IUPAC Name: (5 α)-17-(Cyclopropylmethyl)-4,5-epoxy-6-methylenemorphinan-3,14-diol hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₅NO₃.HCl.1 $\frac{3}{4}$ H₂O

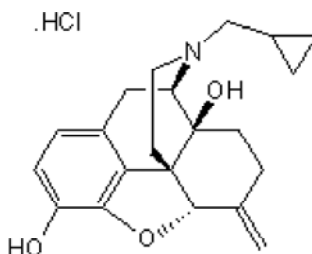
Batch Molecular Weight: 407.41

Physical Appearance: White solid

Solubility: water to 100 mM
DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.0% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	61.91	7.3	3.44
Found	62.13	7.24	3.48

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

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Description:

Opioid receptor antagonist; displays a longer half life than Naloxone. Exhibits neuroprotective effects after traumatic brain injury in the rat. Deuterated analog also available.

Physical and Chemical Properties:

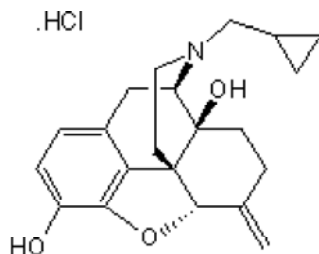
Batch Molecular Formula: C₂₁H₂₅NO₃.HCl.1 $\frac{3}{4}$ H₂O

Batch Molecular Weight: 407.41

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Vink *et al* (1990) Opiate antagonist nalmefene improves intracellular free Mg²⁺, bioenergetic state, and neurologic outcome following traumatic brain injury in rats. *J.Neurosci.* **10** 3524. PMID: 2230942.

Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM

DMSO 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).

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.

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