TOCRIS a biotechne brand

Print Date: Oct 4th 2021

Batch No.: 3

Certificate of Analysis

www.tocris.com

Catalog No.: 4085

Product Name: Nalmefene hydrochloride

CAS Number: 58895-64-0

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

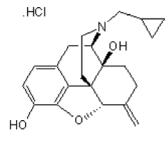
1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility:

Batch Molecular Structure:

C₂₁H₂₅NO₃.HCl.H₂O 393.91 White solid water to 100 mM DMSO to 100 mM

Desiccate at RT



2. ANALYTICAL DATA

Storage:

HPLC: ¹H NMR: Mass Spectrum:

Shows 99.8% purity Consistent with structure Consistent with structure

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

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Description:

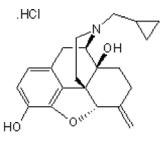
Nalmefene hydrochloride is an opioid receptor antagonist; displays a longer half life than Naloxone. Exhibits neuroprotective effects after traumatic brain injury in the rat.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₁H₂₅NO₃.HCl.H₂O Batch Molecular Weight: 393.91 Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:



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 $45-60^{\circ}C$ 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:

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.

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