# 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

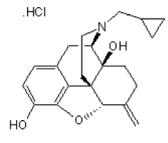
## 1. PHYSICAL AND CHEMICAL PROPERTIES

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

**Batch Molecular Structure:** 

C<sub>21</sub>H<sub>25</sub>NO<sub>3</sub>.HCl.H<sub>2</sub>O 393.91 White solid water to 100 mM DMSO to 100 mM

Desiccate at RT



2. ANALYTICAL DATA

Storage:

HPLC: <sup>1</sup>H 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

# TOCRIS a biotechne brand

## **Product Information**

## Print Date: Oct 4th 2021

Batch No.: 3

## www.tocris.com

### Product Name: Nalmefene hydrochloride

CAS Number: 58895-64-0

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

### **Description:**

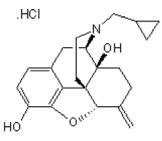
Nalmefene hydrochloride is an opioid receptor antagonist; displays a longer half life than Naloxone. Exhibits neuroprotective effects after traumatic brain injury in the rat.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>21</sub>H<sub>25</sub>NO<sub>3</sub>.HCl.H<sub>2</sub>O 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).

Catalog No.: 4085

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 Mg<sup>2+</sup>, bioenergetic state, and neurologic outcome following traumatic brain injury in rats. J.Neurosci. **10** 3524. PMID: 2230942.

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

bio-techne.comNorth AmericaChinaEurope Middle East AfricaRest of Worldinfo@bio-techne.comTel: (800) 343 7475info.cn@bio-techne.comTel: +44 (0) 1235 529449www.tocris.com/distributorstechsupport@bio-techne.comTel: +86 (21) 52380373Tel: +44 (0) 1235 529449tel: +1 612 379 2956