

**Product Name:** Clocinnamox mesylate

**Catalog No.:** 0898

**Batch No.:** 5

CAS Number: 117332-69-1

IUPAC Name: 14β-(*p*-Chlorocinnamoylamino)-7,8-dihydro-*N*-cyclopropylmethylmorphinone mesylate

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>29</sub>H<sub>29</sub>ClN<sub>2</sub>O<sub>4</sub>.CH<sub>3</sub>SO<sub>3</sub>H.H<sub>2</sub>O

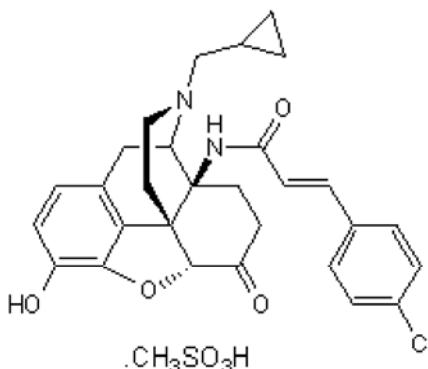
**Batch Molecular Weight:** 619.13

**Physical Appearance:** White solid

**Solubility:** DMSO to 100 mM  
ethanol to 25 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.5 (Chloroform:Methanol [9:1])

**HPLC:** Shows 98.9% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Optical Rotation:** [α]<sub>D</sub> = -1.58 (Concentration = 1, Solvent = DMSO)

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	58.2	5.7	4.52
Found	58.28	5.72	4.5

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**Description:**

Systemically active, irreversible μ-opioid receptor antagonist (apparent K<sub>i</sub> values are 0.7, 1.9 and 5.7 nM for mouse μ, δ and κ receptors respectively).

**Physical and Chemical Properties:**

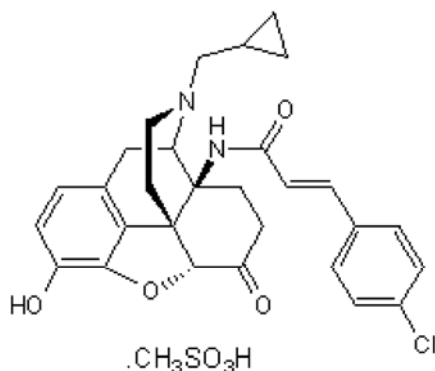
Batch Molecular Formula: C<sub>29</sub>H<sub>29</sub>ClN<sub>2</sub>O<sub>4</sub>.CH<sub>3</sub>SO<sub>3</sub>H.H<sub>2</sub>O

Batch Molecular Weight: 619.13

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol 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.

**References:**

**Broadbear et al** (2000) Methocinnamox is a potent, long-lasting, and selective antagonist of morphine-mediated antinociception in the mouse: comparison with clocinnamox, β-funaltrexamine, and β-chlornaltrexamine. *J.Pharmacol.Exp.Ther.* **294** 933. PMID: 10945843.

**Zernig et al** (1996) Mechanism of clocinnamox blockade of opioid receptors: evidence from *in vitro* and *ex vivo* binding and behavioural assays. *J.Pharmacol.Exp.Ther.* **279** 23. PMID: 8858971.

**Burke et al** (1994) Irreversible opioid antagonist effects of clocinnamox on opioid analgesia and mu receptor binding in mice. *J.Pharmacol.Exp.Ther.* **271** 715. PMID: 7965787.

**Aceto et al** (1989) Very long-acting narcotic antagonists. The 14β-p-substituted cinnamoylamino morphinones and their partial mu agonist codeinone relatives. *Arzneimittelforschung* **39** 570. PMID: 2547389.

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