

Certificate of Analysis

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Product Name: Naltrexone hydrochloride

Catalog No.: 0677

Batch No.: 7

CAS Number: 16676-29-2

EC Number: 240-723-0

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₀H₂₃NO₄.HCl.2H₂O

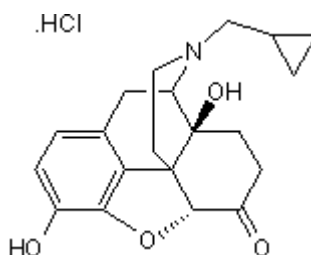
Batch Molecular Weight: 413.9

Physical Appearance: White solid

Solubility: water to 100 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: [α]_D = -190 (Concentration = , Solvent =)

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	58.04	6.82	3.38
Found	58.02	6.72	3.36

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

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Description:

Opioid antagonist.

Physical and Chemical Properties:

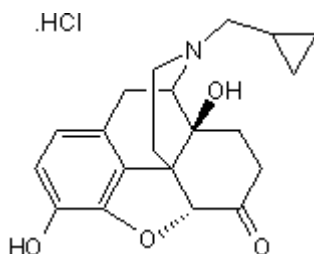
Batch Molecular Formula: C₂₀H₂₃NO₄.HCl.2H₂O

Batch Molecular Weight: 413.9

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

water 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.

References:

Gold et al (1982) Naltrexone, opiate addiction, and endorphins. *Med.Res.Rev.* **2** 211. PMID: 6289026.

Tempel et al (1982) Supersensitivity of brain opiate receptor subtypes after chronic naltrexone treatment. *Life Sci.* **31** 1401. PMID: 6292636.

Zukin et al (1982) Naltrexone-induced opiate receptor supersensitivity. *Brain Res.* **245** 285. PMID: 6289965.

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