# **Certificate of Analysis**

#### Product Name: Methylnaltrexone bromide

CAS Number: 73232-52-7 Catalog No.: 6109 EC Number: 615-932-9 Batch No.: 1

IUPAC Name: 17-(Cyclopropylmethyl)-4,5α-epoxy-3,14-dihydroxy-17-methyl-6-oxomorphinanium bromide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

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

C21H26BrNO4.1/2H2O 445.35 Off White solid water to 100 mM DMSO to 100 mM Store at -20°C

## Storage: **Batch Molecular Structure:**

### 2. ANALYTICAL DATA

HPLC: <sup>1</sup>H NMR: Mass Spectrum:

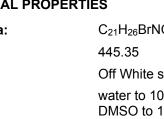
Microanalysis:

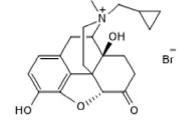
Shows 100% purity Consistent with structure Consistent with structure

|             | Carbon Hydrogen Nitrogen |      |      |  |  |
|-------------|--------------------------|------|------|--|--|
| Theoretical | 56.64                    | 6.11 | 3.15 |  |  |
| Found       | 56.81                    | 5.92 | 3.18 |  |  |

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

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## **Product Information**

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Print Date: Apr 9th 2020

Batch No.: 1

### Product Name: Methylnaltrexone bromide

CAS Number: 73232-52-7

IUPAC Name: 17-(Cyclopropylmethyl)-4,5α-epoxy-3,14-dihydroxy-17-methyl-6-oxomorphinanium bromide

#### **Description:**

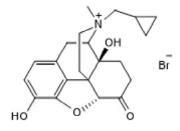
Peripherally restricted  $\mu$ -opioid antagonist. Antagonizes the effects of morphine (Cat. No. 5158) on contraction of isolated guinea pig ileum. Quaternary derivative of naltrexone (Cat. No. 0677).

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

Batch Molecular Formula: C<sub>21</sub>H<sub>26</sub>BrNO<sub>4</sub>.½H<sub>2</sub>O Batch Molecular Weight: 445.35 Physical Appearance: Off White solid

Minimum Purity: ≥98%

#### **Batch Molecular Structure:**



## Storage: Store at -20°C

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:

Valentino et al (1981) Quaternary naltrexone: evidence for the central mediation of discriminative stimulus effects of narcotic agonists and antagonists. J.Pharmacol.Exp.Ther. 217 652. PMID: 6262493.

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