

Certificate of Analysis

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Product Name: Buprenorphine hydrochloride

Catalog No.: 2808

Batch No.: 4

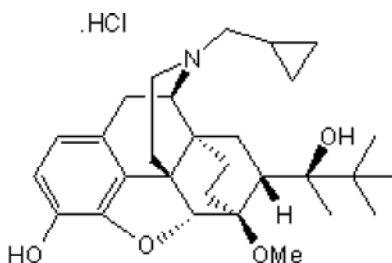
CAS Number: 53152-21-9

EC Number: 258-396-8

IUPAC Name: [5 α ,7 α (S)]-17-(Cyclopropylmethyl)- α -(1,1-dimethylethyl)-4,5-epoxy-18,19-dihydro-3-hydroxy-6-methoxy- α -methyl-6,14-ethenomorphinan-7-methanol hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₉H₄₁NO₄.HCl
Batch Molecular Weight: 504.1
Physical Appearance: White solid
Solubility: water to 25 mM
 ethanol to 50 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows >99% purity
Optical Rotation: [α]_D = -94.8 (Concentration = 2.5, Solvent = Ethanol)

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

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Description:

Buprenorphine hydrochloride is a ORL₁ receptor agonist that also displays mixed antagonist/partial agonist activity at κ , δ and μ -opioid receptors.

Physical and Chemical Properties:

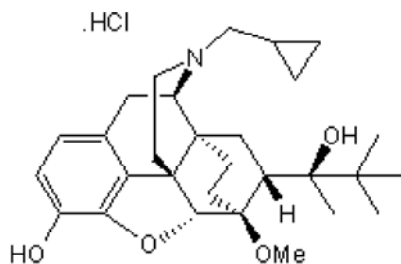
Batch Molecular Formula: C₂₉H₄₁NO₄.HCl

Batch Molecular Weight: 504.1

Physical Appearance: White solid

Minimum Purity: \geq 99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

water to 25 mM
ethanol to 50 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.

Other Information:

INFORMATION FOR CUSTOMERS IN THE UK ONLY

This product is a Schedule 3 Home Office controlled substance and customers in the UK are required to hold the relevant licence or be exempt from restrictions in order to purchase and possess this material.

References:

Tzschentke (2002) Behavioral pharmacology of Bupren., with a focus on preclinical models of reward and addiction. *Psychopharmacology* **161** 1. PMID: 11967625.

Wendt et al (1999) Agonist effect of Bupren. in a nociceptin/OFQ receptor-triggered reporter gene assay. *Mol.Pharmacol.* **56** 334. PMID: 10419552.

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