

Certificate of Analysis

Print Date: Jan 13th 2016

www.tocris.com

Product Name: Meptazinol hydrochloride Catalog No.: 3636 Batch No.: 3

CAS Number: 59263-76-2 EC Number: 261-683-0

IUPAC Name: 3-(3-Ethylhexahydro-1-methyl-1*H*-azepin-3-yl)phenol hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₅H₂₃NO.HCl

Batch Molecular Weight: 269.81 **Physical Appearance:** White solid

Solubility: water to 100 mM

DMSO to 75 mM ethanol to 100 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:

HO .HCI

2. ANALYTICAL DATA

HPLC: Shows 100% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 66.77 8.97 5.19 Found 66.66 9.05 5.25



Product Information

Print Date: Jan 13th 2016

www.tocris.com

Product Name: Meptazinol hydrochloride Catalog No.: 3636 Batch No.: 3

CAS Number: 59263-76-2 EC Number: 261-683-0

IUPAC Name: 3-(3-Ethylhexahydro-1-methyl-1*H*-azepin-3-yl)phenol hydrochloride

Description:

Centrally active opioid analgesic. Partial agonist at the μ_1 opioid receptor. Also shown to inhibit acetylcholinesterase.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₅H₂₃NO.HCl

Batch Molecular Weight: 269.81 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Desiccate at +4°C

Solubility & Usage Info:

water to 100 mM DMSO to 75 mM ethanol 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:

Spiegel and Pasternak (1984) Meptazinol: a novel Mu-1 selective opioid analgesic. J.Pharmacol.Exp.Ther. 228 414. PMID: 6141283. Galli et al (1996) Reversible inhibition of cholinesterases by opioids: possible pharmacological consequences. J.Pharm.Pharmacol. 48