

Certificate of Analysis

www.tocris.com

Product Name: GT 2016

Catalog No.: 2419

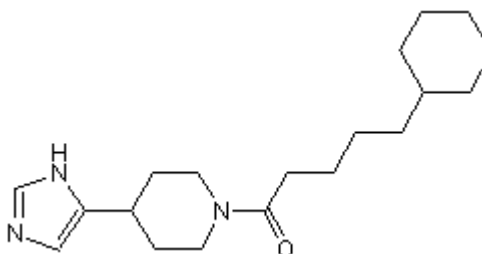
Batch No.: 1

CAS Number: 152241-24-2

IUPAC Name: 5-Cyclohexyl-1-[4-(1*H*-imidazol-5-yl)-1-piperidinyl]-1-pentanone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₃₁N₃O
Batch Molecular Weight: 317.47
Physical Appearance: White solid
Solubility: DMSO to 100 mM
ethanol to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.15 (Chloroform:Methanol [8.5:1.5])
HPLC: Shows 99.1% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	71.88	9.84	13.24
Found	71.88	9.9	13.29

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

Product Name: GT 2016

Catalog No.: 2419

Batch No.: 1

CAS Number: 152241-24-2

IUPAC Name: 5-Cyclohexyl-1-[4-(1*H*-imidazol-5-yl)-1-piperidinyl]-1-pentanone

Description:

High affinity H₃ receptor antagonist (K_i = 43.8 nM). Displays selectivity against H₁ and H₂ receptors (IC₅₀ >10 μM). Increases the release of histamine in the cerebral cortex. Displays no activity at histamine methyltransferase in vitro at concentrations up to 3 μM. Brain penetrant.

Physical and Chemical Properties:

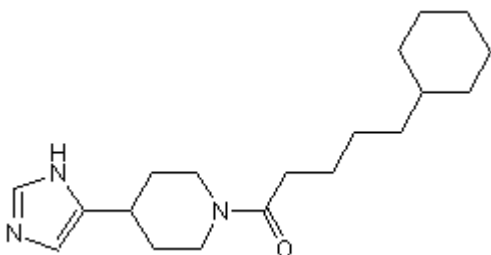
Batch Molecular Formula: C₁₉H₃₁N₃O

Batch Molecular Weight: 317.47

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 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:

Tedford et al (1995) Pharmacological characterization of GT-2016, a non-thiourea-containing histamine H₃ receptor antagonist: in vitro and in vivo studies. *J.Pharmacol.Exp.Ther.* **275** 598. PMID: 7473144.

Tedford et al (1999) Development of *trans*-2-[1*H*-imidazol-4-yl] cyclopropane derivatives as new high-affinity histamine H₃ receptor ligands. *J.Pharmacol.Exp.Ther.* **289** 1160. PMID: 10215700.

Yates et al (1999) Identification and pharmacological characterization of a series of new 1*H*-4-substituted-imidazolyl histamine H₃ receptor ligands. *J.Pharmacol.Exp.Ther.* **289** 1151. PMID: 10215699.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956