



# **Certificate of Analysis**

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Product Name: ATC 0065 Catalog No.: 3359 Batch No.: 1

CAS Number: 510732-84-0

IUPAC Name:  $N^2$ -[cis-4-[[2-[4-Bromo-2-(trifluoromethoxy)phenyl]ethyl]amino]cyclohexyl]- $N^4$ ,  $N^4$ -dimethyl-2,4-quinazolinediamine

dihydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{25}H_{29}BrF_3N_5O.2HCI.12H_2O$ 

**Batch Molecular Weight:** 634.36 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

ethanol to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:

#### 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.25$  (Dichloromethane:Methanol [9:1])

**HPLC:** Shows 98.2% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 47.33 5.08 11.04 Found 47.27 5.12 10.89



## **Product Information**

Print Date: Apr 1st 2016

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#### **Description:**

Orally active, potent and selective melanin-concentrating hormone receptor 1 (MCH<sub>1</sub>) antagonist (IC $_{50}$  = 15.7 nM) that displays > 96-fold selectivity over MCH $_2$ . Exhibits antidepressant and anxiolytic activity in vivo. Also displays affinity for 5-HT $_{1A}$  and 5-HT $_{2B}$  receptors (IC $_{50}$  values are 62.9 and 266 nM respectively).

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

Batch Molecular Formula: C<sub>25</sub>H<sub>29</sub>BrF<sub>3</sub>N<sub>5</sub>O.2HCl.½H<sub>2</sub>O

Batch Molecular Weight: 634.36 Physical Appearance: White solid

Minimum Purity: >98%

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

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Storage: Desiccate at RT

### 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:

Chaki et al (2005) Anxiolytic- and antidepressant-like profile of ATC0065 and ATC0175: Nonpeptide and orally active melanin-concentrating hormone receptor 1 antagonists. J.Pharmacol.Exp.Ther. 313 832.

**Dyck** et al (2005) Small molecule melanin-concentrating hormone receptor 1 (MCH1R) antagonists as anxiolytic and antidepressive agents. Drug Dev.Res. **65** 291.

Kanuma et al (2006) Identification of 4-amino-2-cyclohexylaminoquinazolines as metabolically stable melanin-concentrating hormone receptor 1 antagonists. Bioorg.Med.Chem. 14 3307. PMID: 16434202.