

# **Certificate of Analysis**

Print Date: Jan 13th 2016

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Product Name: LU AA33810 Catalog No.: 3562 Batch No.: 2

CAS Number: 304008-29-5

IUPAC Name: N-[[trans-4-[(4,5-Dihydro[1]benzothiepino[5,4-d]thiazol-2-yl)amino]cyclohexyl]methyl]methanesulfonamide

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{19}H_{25}N_3O_2S_3$ .  $V_2H_2O$ 

**Batch Molecular Weight:** 432.63 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

Storage: Store at RT

**Batch Molecular Structure:** 

### 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.59$  (Chloroform:Methanol [9:1])

HPLC: Shows 98.3% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 52.75 6.06 9.71 Found 52.89 5.8 9.7



# **Product Information**

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#### **Description:**

Potent neuropeptide Y (NPY)  $Y_5$  receptor antagonist ( $K_i = 1.5$  nM in vitro). Displays  $\geq 3300$ -fold affinity for  $Y_5$  over  $Y_1$ ,  $Y_2$  and  $Y_4$  receptors. Also binds human 5-HT<sub>2B</sub> and 5-HT<sub>1A</sub> receptors ( $K_i$  values are 247 and 478 nM respectively). Exerts anxiolytic- and antidepressant-like effects in rat models of stress sensitivity.

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

Batch Molecular Formula:  $C_{19}H_{25}N_3O_2S_3$ .  $1/2H_2O$ 

Batch Molecular Weight: 432.63 Physical Appearance: White solid

**Minimum Purity: >98%** 

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

Storage: Store at RT

# Solubility & Usage Info:

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°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:

**Walker** *et al* (2009) The novel neuropeptide Y  $Y_5$  receptor antagonist Lu AA33810 [*N*-[[*trans*-4-[(4,5-dihydro[1]benzothiepino[5,4-d] thiazol-2-yl)amino]cyclohexyl]methyl]-methanesulfonamide] exerts anxiolytic- and antidepressant-like effects in rat models of stress anxiety. J.Pharmacol.Exp.Ther. *328* 900. PMID: 19098165.