Batch No.: 5



# **Certificate of Analysis**

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Catalog No.: 1477

Product Name: GR 127935 hydrochloride

CAS Number: 148642-42-6

IUPAC Name: N-[4-Methoxy-3-(4-methyl-1-piperazinyl)phenyl]-2'-methyl-4'-(5-methyl-1,2,4-oxadiazol-3-yl)-1,1'-biphenyl-4-

carboxamide hydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{29}H_{31}N_5O_3.HCl.H_2O$ 

Batch Molecular Weight: 552.08

Physical Appearance: Off-white solid
Solubility: water to 100 mM
Storage: Desiccate at RT

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.59$  (Dichloromethane:Methanol:Ammonia soln. [9:1:2])

HPLC: Shows 99.1% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.09 6.21 12.69 Found 63.09 6.07 12.51



# **Product Information**

Print Date: Jan 19th 2014

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carboxamide hydrochloride

#### **Description:**

Potent and selective 5-HT $_{1B/1D}$  receptor antagonist (pK $_{\rm i}$  values are 8.5 for both guinea pig 5-HT $_{\rm 1D}$  and rat 5-HT $_{\rm 1B}$  receptors). Displays > 100-fold selectivity over 5HT $_{\rm 1A}$ , 5-HT $_{\rm 2C}$  receptors and other receptor types. Centrally active following oral administration.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>29</sub>H<sub>31</sub>N<sub>5</sub>O<sub>3</sub>.HCl.H<sub>2</sub>O

Batch Molecular Weight: 552.08 Physical Appearance: Off-white solid

Minimum Purity: >99%

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

Storage: Desiccate at RT

### Solubility & Usage Info:

water 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:

**Clitherow** *et al* (1994) Evolution of a novel series of [(*N*,*N*-dimethylamino)propyl]- and piperazinylbenzalides as the first selective 5-HT<sub>1D</sub> antagonists. J.Med.Chem. **37** 2253. PMID: 8057272.

**De Vries** *et al* (1996) Blockade of porcine carotid vascular response to sumatriptan by GR 127935, a selective 5-HT<sub>1D</sub> receptor antagonist. Br.J.Pharmacol. *118* 85. PMID: 8733580.

**Knobelman** *et al* (2001) Genetic regulation of extracellular serotonin by 5-hydroxytryptamine<sub>1A</sub> and 5-hydroxytryptamine<sub>1B</sub> autoreceptors in different brain regions of the mouse. J.Pharmacol.Exp.Ther. **298** 1083. PMID: 11504805.

