

## Certificate of Analysis

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**Product Name:** VUF 10166

**Catalog No.:** 4532

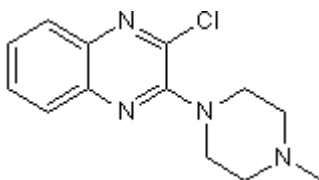
**Batch No.:** 1

CAS Number: 155584-74-0

IUPAC Name: 2-Chloro-3-(4-methyl-1-piperazinyl)quinoxaline

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>13</sub>H<sub>15</sub>ClN<sub>4</sub>  
**Batch Molecular Weight:** 262.74  
**Physical Appearance:** Beige solid  
**Solubility:** DMSO to 100 mM  
ethanol to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**Melting Point:** Between 69 - 70°C  
**HPLC:** Shows 99% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen	Chlorine
Theoretical	59.43	5.75	21.32	13.49
Found	59.72	5.36	21.24	13.76

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

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**Description:**

High affinity 5-HT<sub>3</sub> receptor antagonist (IC<sub>50</sub> values are 0.04 and 22 nM for human 5HT<sub>3A</sub> and 5-HT<sub>3AB</sub> receptors respectively). Exhibits partial agonist activity at 5-HT<sub>3A</sub> receptors at higher concentrations (EC<sub>50</sub> = 5.2 μM). Also histamine H<sub>4</sub> receptor antagonist (pK<sub>i</sub> = 6.64 in HEK cells).

**Physical and Chemical Properties:**

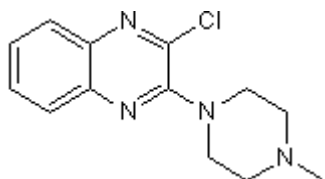
Batch Molecular Formula: C<sub>13</sub>H<sub>15</sub>ClN<sub>4</sub>

Batch Molecular Weight: 262.74

Physical Appearance: Beige solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store 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:**

**Smits et al (2008)** Fragment based design of new H<sub>4</sub> receptor-ligands with anti-inflammatory properties in vivo. *J.Med.Chem.* **51** 2457. PMID: 18357976.

**Thompson et al (2012)** VUF10166, a novel compound with differing activities at 5-HT<sub>3A</sub> and 5-HT<sub>3AB</sub> receptors. *J.Pharmacol.Exp.Ther.* **341** 350. PMID: 22306960.

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