

## Certificate of Analysis

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**Product Name:** VUF 5681 dihydrobromide

**Catalog No.:** 2493

**Batch No.:** 1

CAS Number: 639089-06-8

IUPAC Name: 4-[3-(1*H*-Imidazol-4-yl)propyl]piperidine dihydrobromide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>11</sub>H<sub>19</sub>N<sub>3</sub>·2HBr·½H<sub>2</sub>O

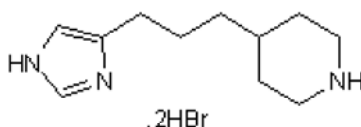
**Batch Molecular Weight:** 364.12

**Physical Appearance:** White solid

**Solubility:** water to 100 mM  
DMSO to 100 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows >99% purity

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

**<sup>13</sup>C NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	36.28	6.09	11.54
Found	36.17	5.84	11.14

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

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**Description:**

Potent histamine H<sub>3</sub> receptor silent antagonist (pK<sub>i</sub> = 8.35).

**Physical and Chemical Properties:**

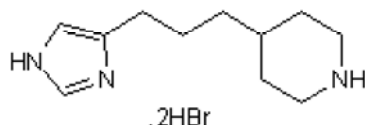
Batch Molecular Formula: C<sub>11</sub>H<sub>19</sub>N<sub>3</sub>·2HBr·½H<sub>2</sub>O

Batch Molecular Weight: 364.12

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Desiccate at RT

**Solubility & Usage Info:**

water to 100 mM

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:**

**Moreno-Delgado *et al*** (2006) Constitutive activity of H<sub>3</sub> autoreceptors modulates histamine synthesis in rat brain through the cAMP/PKA pathway. *Neuropharmacology* **51** 517. PMID: 16769092.

**Leurs *et al*** (2005) The histamine H<sub>3</sub> receptor: from gene cloning to H<sub>3</sub> receptor drugs. *Nat.Rev.Drug Discov.* **4** 107. PMID: 15665857.

**Kitbunnadaj *et al*** (2004) Identification of 4-(1*H*-imidazol-4(5)-ylmethyl)pyridine (immethridine) as a novel, potent, and highly selective histamine H<sub>3</sub> receptor agonist. *J.Med.Chem.* **47** 2414. PMID: 15115383.

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