

**Product Name:** BIMU 8

**Catalog No.:** 4374

**Batch No.:** 4

CAS Number: 134296-40-5

IUPAC Name: 2,3-Dihydro-*N*-[(3-*endo*)-8-methyl-8-azabicyclo[3.2.1]oct-3-yl]-3-(1-methylethyl)-2-oxo-1*H*-benzimidazole-1-carboxamide hydrochloride

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>19</sub>H<sub>26</sub>N<sub>4</sub>O<sub>2</sub>.HCl.½H<sub>2</sub>O

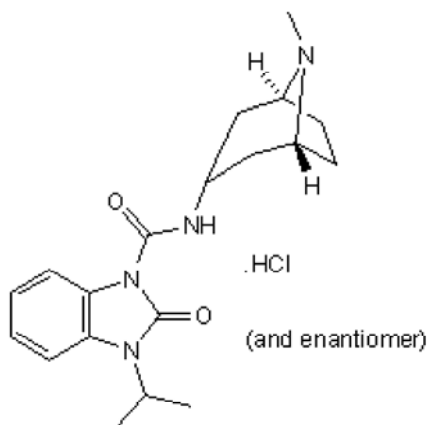
**Batch Molecular Weight:** 387.91

**Physical Appearance:** Off White solid

**Solubility:** water to 75 mM  
DMSO to 100 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.2% purity

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

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	58.83	7.28	14.44
Found	58.64	7.09	14.26

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

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**Description:**

Potent 5-HT<sub>4</sub> receptor full agonist (K<sub>D</sub> = 77 nM and EC<sub>50</sub> = 18 nM for wild type 5-HT<sub>4</sub> receptors). Binds to receptors in a mechanism different to that of the endogenous ligand 5-HT.

**Physical and Chemical Properties:**

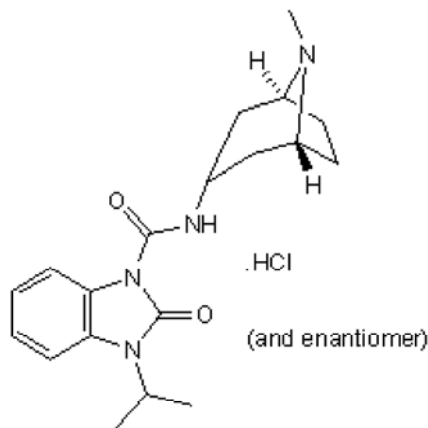
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Batch Molecular Weight: 387.91

Physical Appearance: Off White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

water to 75 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:**

**Pellissier et al** (2009) Conformational toggle switches implicated in basal constitutive and agonist-induced activated states of 5-hydroxytryptamine-4 receptors. *Mol.Pharmacol.* **75** 982. PMID: 19168624.

**Schaus et al** (1998) Synthesis and structure-activity relationships of potent and orally active 5-HT<sub>4</sub> receptor antagonists: Indazole and benzimidazoline derivatives. *J.Med.Chem.* **41** 1943. PMID: 9599243.

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