

Product Name: BIMU 8

Catalog No.: 4374

Batch No.: 5

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: C₁₉H₂₆N₄O₂.HCl.2½H₂O

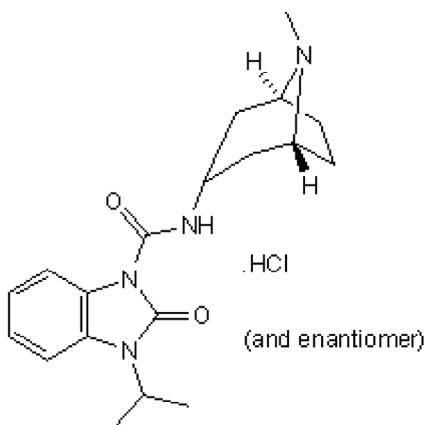
Batch Molecular Weight: 419.43

Physical Appearance: White solid

Solubility: water to 75 mM
DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen	Chlorine
Theoretical	54.41	7.57	13.36	8.45
Found	53.76	7.81	13.42	8.45

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

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Description:

BIMU 8 is a potent 5-HT₄ receptor full agonist (K_D = 77 nM and EC₅₀ = 18 nM for wild type 5-HT₄ receptors). Binds to receptors in a mechanism different to that of the endogenous ligand 5-HT.

Physical and Chemical Properties:

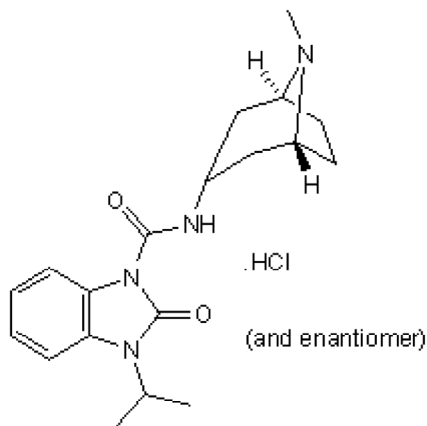
Batch Molecular Formula: C₁₉H₂₆N₄O₂·HCl·2½H₂O

Batch Molecular Weight: 419.43

Physical Appearance: 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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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-HT₄ receptor antagonists: Indazole and benzimidazoline derivatives. *J.Med.Chem.* **41** 1943. PMID: 9599243.

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