

**Product Name:** Ivabradine hydrochloride

**Catalog No.:** 6542

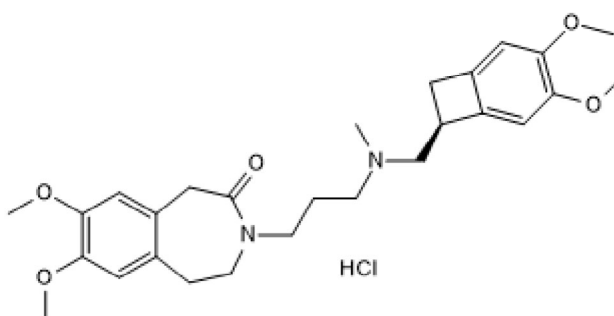
**Batch No.:** 2

CAS Number: 148849-67-6

IUPAC Name: 3-[3-[[[(7S)-3,4-Dimethoxybicyclo[4.2.0]octa-1,3,5-trien-7-yl]methyl]methylamino]propyl]-1,3,4,5-tetrahydro-7,8-dimethoxy-2H-3-benzazepin-2-one hydrochloride

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>27</sub>H<sub>36</sub>N<sub>2</sub>O<sub>5</sub>.HCl.  
**Batch Molecular Weight:** 505.05  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
DMSO to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	64.21	7.38	5.55
Found	63.93	7.16	5.4

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

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**Description:**

Ivabradine hydrochloride is a HCN channel blocker (IC<sub>50</sub> is approximately 0.5 - 2.5 μM). Bradycardic agent that inhibits I<sub>f</sub> pacemaker current in sinoatrial node cells.

**Physical and Chemical Properties:**

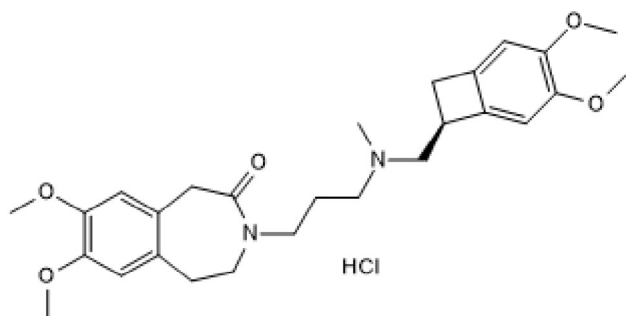
Batch Molecular Formula: C<sub>27</sub>H<sub>36</sub>N<sub>2</sub>O<sub>5</sub>.HCl.

Batch Molecular Weight: 505.05

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**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. \*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:**

**Novella Romanelli et al** (2016) HCN channel modulators: the need for selectivity. *Curr.Top.Med.Chem.* **16** 1764. PMID: 26975509.

**Thollon et al** (1994) Electrophysiological effects of S 16257, a novel sino-atrial node modulator, on rabbit and guinea-pig cardiac preparations: comparison with UL-FS 49. *Br.J.Pharmacol.* **112** 37. PMID: 8032660.

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