

# **Certificate of Analysis**

Print Date: May 12th 2021

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Product Name: Bepridil hydrochloride Catalog No.: 4117 Batch No.: 5

CAS Number: 68099-86-5

IUPAC Name: N-Benzyl-N-(3-isobutoxy-2-pyrrolidin-1-yl-propyl)aniline hydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{24}H_{34}N_2O.HCl.\frac{1}{2}H_2O$ 

**Batch Molecular Weight:** 412.01 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM
Storage: Desiccate at RT

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**HPLC:** Shows 99.8% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen Chlorine

Theoretical 69.96 8.81 6.8 8.6 Found 70.26 8.85 6.79 8.56



# **Product Information**

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#### **Description:**

Calcium channel blocker. Also inhibits  $Na^+/Ca^{2^+}$  exchange (NCX), sodium channels and cardiac sarcolemmal  $K_{ATP}$  channels; opens mitochondrial  $K_{ATP}$  channels. Antiarrhythmic and antihypertensive; acts as a calcium sensitizer.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>24</sub>H<sub>34</sub>N<sub>2</sub>O.HCl.½H<sub>2</sub>O

Batch Molecular Weight: 412.01 Physical Appearance: White solid

Minimum Purity: ≥99%

#### **Batch Molecular Structure:**

Storage: Desiccate at RT

#### Solubility & Usage Info:

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:

**Sato** *et al* (2006) Bepridil, an antiarrythmic drug, opens mitochondrial K<sub>ATP</sub> channels, blocks sarcolemmal K<sub>ATP</sub> channels, and confers cardioprotection. J.Pharmacol.Exp.Ther. *316* 182. PMID: 16174795.

**Wantanabe and Kimura** (2001) Blocking effect of bepridil on Na+/ Ca<sup>2+</sup> exchange current in gunea pig cardiac ventricular myocytes. Jpn.J.Pharmacol. **85** 370. PMID: 11388640.

Gill et al (1992) Pharmacology of bepridil. Am.J.Cardiol. 69 11D. PMID: 1372785.