

**Product Name:** M8 B hydrochloride

**Catalog No.:** 5324

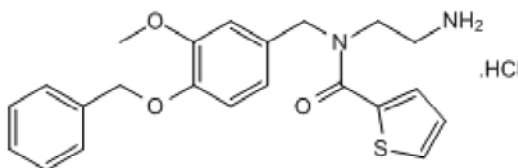
**Batch No.:** 1

CAS Number: 883976-12-3

IUPAC Name: *N*-(2-Aminoethyl)-*N*-[[3-methoxy-4-(phenylmethoxy)phenyl]methyl]-2-thiophenecarboxamide hydrochloride

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>S.HCl.½H<sub>2</sub>O  
**Batch Molecular Weight:** 441.97  
**Physical Appearance:** White solid  
**Solubility:** water to 10 mM with sonication  
DMSO to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.2 (Dichloromethane:Methanol [9:1])  
**HPLC:** Shows 99.7% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	59.79	5.93	6.34
Found	60	5.9	6.39

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**Description:**

Potent and selective TRPM8 channel blocker. Blocks cold- and icilin-induced TRPM8 activation in vitro (IC<sub>50</sub> values are 7.8 and 26.9 nM respectively). Exhibits no effect at other TRP channels (IC<sub>50</sub> > 20 μM). Reduces body temperature in vivo.

**Physical and Chemical Properties:**

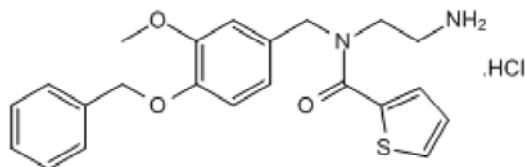
Batch Molecular Formula: C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>S.HCl.½H<sub>2</sub>O

Batch Molecular Weight: 441.97

Physical Appearance: White solid

**Minimum Purity:** ≥99%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

water to 10 mM with sonication  
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:**

**Almeida et al** (2012) Pharmacological blockade of the cold receptor TRPM8 attenuates autonomic and behavioral cold defenses and decreases deep body temperature. *J.Neurosci.* **32** 2086. PMID: 22323721.

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**bio-techne.com**

info@bio-techne.com  
techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com  
Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors  
Tel:+1 612 379 2956