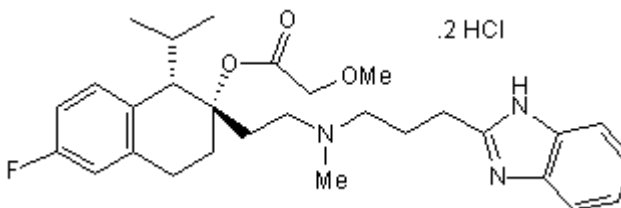


**Product Name:** Mibefradil dihydrochloride **Catalog No.:** 2198 **Batch No.:** 5  
**CAS Number:** 116666-63-8  
**IUPAC Name:** (1*S*,2*S*)-2-[2-[[3-(1*H*-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl methoxyacetoacetate dihydrochloride

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>29</sub>H<sub>38</sub>FN<sub>3</sub>O<sub>3</sub>·2HCl·½H<sub>2</sub>O  
**Batch Molecular Weight:** 577.57  
**Physical Appearance:** White solid  
**Solubility:** water to 50 mM  
DMSO to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.7% purity  
**Chiral HPLC:** Shows 99.8% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = +36.1 (Concentration = 1, Solvent = Chloroform)

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	60.31	7.15	7.28
Found	60.25	7.18	7.13

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

**Product Name:** Mibefradil dihydrochloride

**Catalog No.:** 2198

**Batch No.:** 5

CAS Number: 116666-63-8

IUPAC Name: (1S,2S)-2-[2-[[3-(1*H*-Benzimidazol-2yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl methoxyacetate dihydrochloride

**Description:**

Ca<sup>2+</sup> channel blocker with moderate selectivity for T-type Ca<sup>2+</sup> channels displaying IC<sub>50</sub> values of 2.7 μM and 18.6 μM for T-type and L-type channels respectively. Antihypertensive agent.

**Physical and Chemical Properties:**

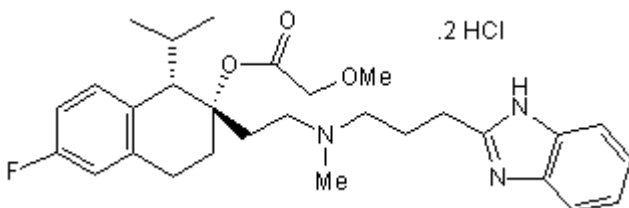
Batch Molecular Formula: C<sub>29</sub>H<sub>38</sub>FN<sub>3</sub>O<sub>3</sub>.2HCl.½H<sub>2</sub>O

Batch Molecular Weight: 577.57

Physical Appearance: White solid

**Minimum Purity:** >97%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

water to 50 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:**

**Osterrieder and Holck** (1989) *In vitro* pharmacologic profile of Ro 40-5967, a novel Ca<sup>2+</sup> channel blocker with potent vasodilator but weak inotropic action. *J.Cardiovasc.Pharmacol.* **13** 754. PMID: 2472524.

**Veniant et al** (1991) Hemodynamic profile of Ro 40-5967 in conscious rats: comparison with diltiazem, verapamil, and amlodipine. *J.Cardiovasc.Pharmacol.* **18** (Suppl 10 ) S55. PMID: 1725005.

**Mehrke et al** (1994) The Ca(++)-channel blocker Ro 40-5967 blocks differently T-type and L-type Ca++ channels. *J.Pharmacol.Exp.Ther.* **271** 1483. PMID: 7996461.

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

**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