

**Product Name:** L-364,373

**Catalog No.:** 2660

**Batch No.:** 1

CAS Number: 103342-82-1

IUPAC Name: 5-(2-Fluorophenyl)-1,3-dihydro-3-(1*H*-indol-3-ylmethyl)-1-methyl-2*H*-1,4-benzodiazepin-2-one

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>25</sub>H<sub>20</sub>FN<sub>3</sub>O.½H<sub>2</sub>O

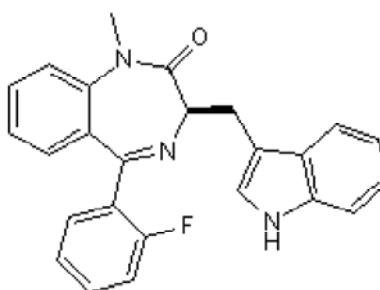
**Batch Molecular Weight:** 406.45

**Physical Appearance:** Off-white solid

**Solubility:** DMSO to 100 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.16 (Ethyl acetate:Petroleum ether [3:7])

**HPLC:** Shows 99.1% purity

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

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	73.88	5.21	10.34
Found	73.76	5.14	10.03

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

**Product Name:** L-364,373

**Catalog No.:** 2660

**Batch No.:** 1

CAS Number: 103342-82-1

IUPAC Name: 5-(2-Fluorophenyl)-1,3-dihydro-3-(1*H*-indol-3-ylmethyl)-1-methyl-2*H*-1,4-benzodiazepin-2-one

**Description:**

Activator of K<sub>v</sub>7.1 (KCNQ1) channels. Activates the cardiac I<sub>Ks</sub> current that decreases action potential duration (APD) in cardiac myocytes.

**Physical and Chemical Properties:**

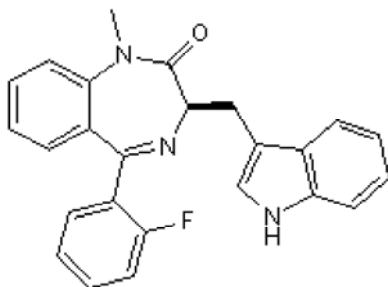
Batch Molecular Formula: C<sub>25</sub>H<sub>20</sub>FN<sub>3</sub>O.½H<sub>2</sub>O

Batch Molecular Weight: 406.45

Physical Appearance: Off-white solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**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:**

**Chadha et al** (2012) Pharmacological dissection of K(V)7.1 channels in systemic and pulmonary arteries. *Br.J.Pharmacol.* **166** 1377. PMID: 22251082.

**Jow et al** (2006) Rb<sup>+</sup> efflux through functional activation of cardiac KCNQ1/minK channels by the benzodiazepine R-L3 (L-364,373). *Assay Drug Dev.Technol.* **4** 443. PMID: 16945016.

**Seebohm et al** (2003) Pharmacological activation of normal and arrhythmia-associated mutant KCNQ1 potassium channels. *Circ.Res.* **93** 941. PMID: 14576198.

**Salata et al** (1998) A novel benzodiazepine that activates cardiac slow delayed rectifier K<sup>+</sup> currents. *Am.Soc.Pharmacol.Exp.Ther.* **53** 220.

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