Bidisomide

Cat. No.: HY-U00232

CAS No.: 116078-65-0

Molecular Formula: $C_{22}H_{34}ClN_3O_2$

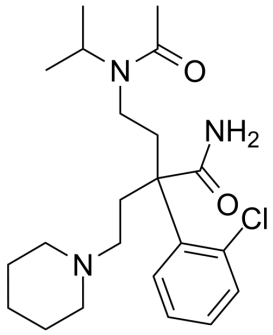
Molecular Weight: 407.98

Target: Others

Pathway: Others

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (612.78 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.4511 mL	12.2555 mL	24.5110 mL
	5 mM	0.4902 mL	2.4511 mL	4.9022 mL
	10 mM	0.2451 mL	1.2256 mL	2.4511 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (5.10 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (5.10 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (5.10 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Bidisomide (SC40230) is a class I antiarrhythmic agent.

In Vivo

The antiarrhythmic effects of Bidisomide, a new class I antiarrhythmic drug is investigated in early-phase ventricular arrhythmias induced by coronary artery occlusion and reperfusion in anesthetized rats. Bidisomide (5 mg/kg) reduces the number of premature ventricular complexes and the incidence of ventricular tachycardia and ventricular fibrillation similarly to Mexiletine (MXT) and Disopyramide (DSP) in rats with ventricular arrhythmias induced by coronary artery occlusion. In rats with ventricular arrhythmias induced by coronary artery reperfusion following a 5 min coronary occlusion,

	the antiarrhythmic effects of 5 mg/kg of Bidisomide are similar to those of the same doses of MXT and DSP. All three drugs significantly slow the heart rate[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration [1]	Rats[1] Male Sprague-Dawley rats weighing 200-280g are used. Thirty-nine rats receive intravenous infusion of saline (n=9), Bidisomide (5 mg/kg, n=10), Mexiletine (MXT, 5 mg/kg, n=10), or Disopyramide (DSP, 5 mg/kg, n=10). In preliminary experiments, 5 mg/kg of MXT and DSP have significant antiarrhythmic effects. The same dose of Bidisomide is used. The injection volume of each agent is adjusted to 0.5 mL with saline. Coronary artery occlusion is induced 5min after drug administration. Electrocardiograms and systemic arterial blood pressure are recorded for 30 min after induction of coronary artery occlusion. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Komori S, et al. Effects of bidisomide (SC-40230), a new class I antiarrhythmic agent, on ventricular arrhythmias induced by coronary artery occlusion and reperfusion in anesthetized rats; comparison with mexiletine and disopyramide. Heart Vessels. 1995;10(1):7-11.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA