Tocainide

Cat. No.: HY-B1798

CAS No.: 41708-72-9

Molecular Formula: $C_{11}H_{16}N_2O$

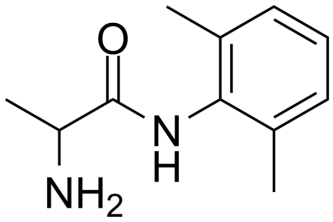
Molecular Weight: 192.26

Target: Sodium Channel

Pathway: Membrane Transporter/Ion Channel

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 : 125 mg/mL (650.16 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	5.2013 mL	26.0065 mL	52.0129 mL
5 mM	1.0403 mL	5.2013 mL	10.4026 mL
10 mM	0.5201 mL	2.6006 mL	5.2013 mL

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

BIOLOGICAL ACTIVITY

Description

Tocainide hydrochloride is an orally activesodium channel blocker, it blocks the sodium channels in the pain-producing foci in the nerve membranes. Tocainide hydrochloride is a primary amine analog of lidocaine, can be used for the treatment of tinnitus[1][2].

IC_{50} & Target

IC50: sodium channel[1]

In Vivo

Tocainide (100 mg/kg) effectively suppresses ventricular ectopic activity in unanesthetized dogs with coronary occlusion. Termination of tocainide infusion in both digitalis toxicity and coronary occlusion models results in prompt return of ventricular ectopic activity[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Alpert JS, et al. Chemistry, pharmacology, antiarrhythmic efficacy and adverse effects of tocainide hydrochloride, an orally active structural analog of lidocaine.

Pharmacotherapy. 1983 Nov-Dec;3(6):316-23.

[2]. De Luca A,et al.Optimal requirements for high affinity and use-dependent block of skeletal muscle sodium channel by N-benzyl analogs of tocainide-like compounds.Mol Pharmacol. 2003 Oct;64(4):932-45.

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