Barnidipine hydrochloride

Cat. No.: HY-107322

CAS No.: 104757-53-1

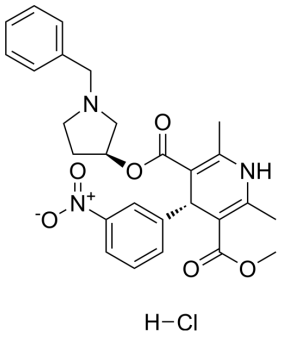
Molecular Formula: $C_{27}H_{30}ClN_3O_6$

Molecular Weight: 528

Target: Calcium Channel

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage: 4°C, sealed storage, away from moisture and light
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (473.48 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.8939 mL	9.4697 mL	18.9394 mL
	5 mM	0.3788 mL	1.8939 mL	3.7879 mL
	10 mM	0.1894 mL	0.9470 mL	1.8939 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 (3.94 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (3.94 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Barnidipine hydrochloride (Mepirodipine hydrochloride) is an L-type calcium antagonist (CaA) with high affinity for [^{3}H] initrendipine binding sites (K_i=0.21 nmol/l), has selective action against CaA receptors[1]. Barnidipine hydrochloride (Mepirodipine hydrochloride) is an antihypertensive agent and acts by the reduction of peripheral vascular resistance secondary to its vasodilatory action[2].

IC_{50} & Target

L-type calcium channel

REFERENCES

[1]. van Zwieten PA, et al. Pharmacological profile of barnidipine: a single optical isomer dihydropyridine calcium antagonist. Blood Press Suppl. 1998;1:5-8.

[2]. Malhotra HS, et al. Barnidipine. Drugs. 2001;61(7):989-96; discussion 997-8.

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