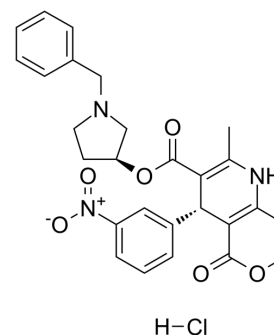


Barnidipine hydrochloride

Cat. No.:	HY-107322
CAS No.:	104757-53-1
Molecular Formula:	C ₂₇ H ₃₀ ClN ₃ O 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)																					
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent</th> <th rowspan="2">Mass</th> <th colspan="3">Concentration</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Preparing Stock Solutions</td> <td>1 mM</td> <td>1.8939 mL</td> <td>9.4697 mL</td> <td>18.9394 mL</td> </tr> <tr> <td>5 mM</td> <td>0.3788 mL</td> <td>1.8939 mL</td> <td>3.7879 mL</td> </tr> <tr> <td>10 mM</td> <td>0.1894 mL</td> <td>0.9470 mL</td> <td>1.8939 mL</td> </tr> </tbody> </table>	Solvent	Mass	Concentration			1 mg	5 mg	10 mg	Preparing Stock Solutions	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
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	Please refer to the solubility information to select the appropriate solvent.																					
In Vivo	<ol style="list-style-type: none"> 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 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 drug and acts by the reduction of peripheral vascular resistance secondary to its vasodilatory action ^[2] .
IC₅₀ & Target	Ki: 0.21 nmol/l ([³ H] initrendipine) ^[1]

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.

Caution: Product has not been fully validated for medical applications. For research use only.

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