Data Sheet (Cat.No.T1385)



Amlodipine

Chemical Properties

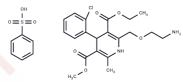
CAS No.: 88150-42-9

Formula: C20H25ClN2O5

Molecular Weight: 408.88

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Amlodipine (UK-48340) is a synthetic dihydropyridine and a calcium channel blocke with antihypertensive and antianginal properties.	
Targets(IC50)	Calcium Channel	
In vitro	In large coronary arteries and aorta, Amlodipine increased nitrite production. Intracellularly, Amlodipine caused neuronal Ca2+ elevation by attenuating KCl depolarization.	
In vivo	In large coronary arteries and aorta, Amlodipine increased nitrite production. Intracellularly, Amlodipine caused neuronal Ca2+ elevation by attenuating KCl depolarization.	

Solubility Information

Solubility	DMSO: 90 mg/mL (220.11 mM), Sonication is recommended.	mM),Sonication is recommended.	
	Ethanol: 76 mg/mL (185.87 mM), Sonication is recommended.		
	(< 1 mg/ml refers to the product slightly soluble or insoluble)		

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4457 mL	12.2285 mL	24.4571 mL
5 mM	0.4891 mL	2.4457 mL	4.8914 mL
10 mM	0.2446 mL	1.2229 mL	2.4457 mL
50 mM	0.0489 mL	0.2446 mL	0.4891 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

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Reference

Zhang X, et al. Circulation, 1998, 97(6), 576-580.

Cheng S, Jin P, Li H, et al. Evaluation of CML TKI Induced Cardiovascular Toxicity and Development of Potential Rescue Strategies in a Zebrafish Model. Frontiers in Pharmacology. 2021: 2866.

Mason RP, et al. J Mol Cell Cardiol, 1999, 31(1), 275-281.

Pan X, Li R, Guo H, et al. Dihydropyridine Calcium Channel Blockers Suppress the Transcription of PD-L1 by Inhibiting the Activation of STAT1. Frontiers in Pharmacology. 2021 Jan 13;11:539261. doi: 10.3389/fphar. 2020.539261. eCollection 2020.

Ding L, Guo H, Zhang J, et al.Zosuquidar Promotes Antitumor Immunity by Inducing Autophagic Degradation of PD-L1.Advanced Science.2024: 2400340.

Nussberger J, et al. Hypertension, 2008, 51(5), 1306-1311.

Mason RP, et al. J Neurochem, 1999, 72(4), 1448-1456.

Sharifi AM, et al. J Hypertens, 1998, 16(4), 457-466.

Pan X, Li R, Guo H, et al. Dihydropyridine Calcium Channel Blockers Suppress the Transcription of PD-L1 by Inhibiting the Activation of STAT1[J]. Frontiers in Pharmacology. 2021, 11: 2233.

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