

Product ID A5044

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## **Product Information**

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CAS No.	111470-99-6	$\sim NH_2$		
Chemical Name	2-[(2-Aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4- dihydro-6-methyl -3,5-pyridinedicarboxylic acid 3-ethyl 5-methyl ester benzenesulfonate			OH ∙ 0=\$=0
Synonym	Amlodipine Benzenesulfonate, Amlor, Istin, Monopina, Norvasc		CI	
Formula	$C_{20}H_{25}CIN_2O_5 \cdot C_6H_5SO_3H$			
Formula Wt.	567.06			
Melting Point	195-204°C	Bulk quanit	ites available	upon request
Purity	≥ <b>98</b> %	Product ID	Size	
Solubility	Slightly soluble in water. Sparingly soluble in ethanol.	A5044	1 g	
	soluble in DMSO(113mg/ml)	A5044	5 g	
		A5044	10 g	
Store Temp	Ambient			
Ship Temp	Ambient			
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**Description** Amlodipine is a dihydropyridine L-type Ca2+ channel blocker that exhibits antihypertensive, anti-anginal, and vasodilatory activities. Amlodipine is clinically used to treat hypertension and angina as it induces relaxation of arterial smooth muscles, decreases blood pressure, and increases blood flow to the heart. Amlodipine also inhibits acid sphingomyelinase (FIASMA), which is involved in programmed cell death. Additionally, this compound improves smooth muscle hypertrophy and collagen deposition, preventing arterial remodeling in hypertensive rats.

**References** Chen JL, Shang QH, Hu W, et al. Role of TGF-B1/Smads pathway in carotid artery remodeling in renovascular hypertensive rats and prevention by Enalapril and Amlodipine. J Geriatr Cardiol. 2012 Jun;9(2):185-91. PMID: 22916067.

Kornhuber J, Tripal P, Reichel M, et al. Functional Inhibitors of Acid Sphingomyelinase (FIASMAs): a novel pharmacological group of drugs with broad clinical applications. Cell Physiol Biochem. 2010;26(1):9-20. PMID: 20502000.

Wang JG. A combined role of calcium channel blockers and angiotensin receptor blockers in stroke prevention. Vasc Health Risk Manag. 2009;5:593-605. PMID: 19688100.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.