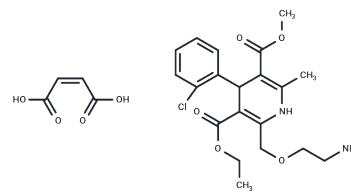


Amlodipine maleate

Chemical Properties

CAS No. :	88150-47-4
Formula:	C ₂₄ H ₂₉ ClN ₂ O ₉
Molecular Weight:	524.95
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Amlodipine maleate (Amvaz) is an orally active dihydropyridine calcium channel blocker that inhibits calcium inward flow by blocking voltage-dependent L-type calcium channels. Amlodipine maleate is used in the study of hypertension and cancer.
Targets(IC50)	Calcium Channel
In vitro	Amlodipine maleate (30 μM; pretreated for 1 h) significantly attenuates the uridine 5'-triphosphate (UTP)-induced increases of [Ca²⁺]_i in A431 cells.[4] Amlodipine maleate (20-40 μM; 48 h) reduces BrdU incorporation to 68.6% and 26.3% in A431 cells, respectively.[4] Amlodipine maleate (30 μM) inhibits the store-operated Ca²⁺ influx evoked by Thapsigargin in Fluo-3-loaded cells.[4]
In vivo	Amlodipine maleate (10 mg/kg; i.p. once daily for 20 days) causes a significant retardation of tumor growth and prolongs the survival of A431 tumor-bearing mice.[4] Amlodipine maleate (5 mg/kg/day; s.c. for 2 weeks) significantly decreases systolic blood pressure (SBP) in VSMC ATP2B1 KO mice.[5]

Solubility Information

Solubility	DMSO: 108.0 mg/mL (205.7 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9049 mL	9.5247 mL	19.0494 mL
5 mM	0.381 mL	1.9049 mL	3.8099 mL
10 mM	0.1905 mL	0.9525 mL	1.9049 mL
50 mM	0.0381 mL	0.1905 mL	0.381 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.

Reference

Gottwald-Hostalek U, et al. Management of Hypertension With a Fixed-Dose (Single-Pill) Combination of Bisoprolol and Amlodipine. Clin Pharmacol Drug Dev. 2017 Jan;6(1):9-18.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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