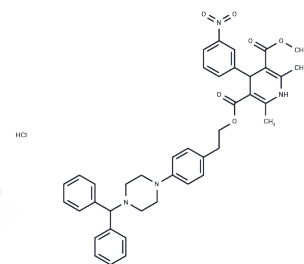


## AE0047 Hydrochloride

## Chemical Properties

CAS No. :	116308-56-6
Formula:	C <sub>41</sub> H <sub>43</sub> ClN <sub>4</sub> O <sub>6</sub>
Molecular Weight:	723.26
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	AE0047 Hydrochloride is a blocker of calcium, and used in the research of the hypertensive disease.
Targets(IC50)	Calcium Channel
In vitro	AE0047 Hydrochloride (4e) is an antagonist of calcium[1]. AE0047 inhibits [3H] nimodipine binding to rat cardiac membrane homogenate (IC <sub>50</sub> of 0.26 nM)[2]. AE0047 (1 μM) inhibits the high K <sup>+</sup> -evoked vascular smooth muscle contraction, and also inhibits [3H]PN200-110 binding (K <sub>i</sub> : 40.9 nM)[3].
In vivo	AE0047 (3 mg/kg) demonstrates an antihypertensive effect, reducing systolic blood pressure (ED <sub>30</sub> of 1.1 mg/kg) [2]. In aorta isolated from stroke-prone spontaneously hypertensive rats (SHRSP), AE0047 (1 or 3 mg/25g SP diet) inhibits blood pressure elevation and enhances endothelium-dependent relaxation in response to acetylcholine [4].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.3826 mL	6.9131 mL	13.8263 mL
5 mM	0.2765 mL	1.3826 mL	2.7653 mL
10 mM	0.1383 mL	0.6913 mL	1.3826 mL
50 mM	0.0277 mL	0.1383 mL	0.2765 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

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Yamanaga K, et al. AE0047-mediated calcium channel blocking in vascular smooth muscles. Gen Pharmacol. 1997 Sep;29(3):337-43.

Nishikawa M, et al. Protection against endothelial abnormalities by a novel calcium channel blocker, AE0047, in stroke-prone spontaneously hypertensive rats. Gen Pharmacol. 1999 Mar;32(3):299-305.

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