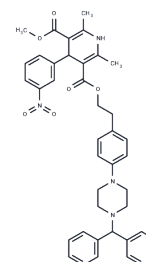


Vatanidipine

Chemical Properties

CAS No. :	116308-55-5
Formula:	C41H42N4O6
Molecular Weight:	686.8
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	Vatanidipine (AE0047) is a novel dihydropyridine (DHP)-type calcium channel blocker with slow-onset pharmacological actions. A slow-onset and long-lasting hypotensive action was observed in various experimental hypertensive models.
Targets(IC50)	Calcium Channel
In vivo	Vatanidipine (AE0047) (10 and 50 ng/kg/min) was administered intrarenally, increases in the basal renal blood flow and urine formation were observed. During Vatanidipine (50 ng/kg/min) infusion, low-frequency RNS-induced antidiuretic action and increase in NESR were markedly attenuated. In addition, high-frequency RNS-induced renal vasoconstriction was significantly suppressed by Vatanidipine infusion at higher doses. Lower doses of Vatanidipine (10 ng/kg/min) tended to attenuate the low- and high-frequency RNS-induced antidiuretic actions, although neither of the RNS-induced increases in NESR were suppressed by lower doses of Vatanidipine[2].

Solubility Information

Solubility	DMSO: 27.5 mg/mL (40.04 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	1.456 mL	7.2801 mL	14.5603 mL
5 mM	0.2912 mL	1.456 mL	2.9121 mL
10 mM	0.1456 mL	0.728 mL	1.456 mL
50 mM	0.0291 mL	0.1456 mL	0.2912 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

Matsumura Y, Hayashi K. Vatanidipine hydrochloride: a new long-lasting antihypertensive agent. *Expert Opin Investig Drugs*. 2001 Jan;10(1):139-55.

Yamasaki T, et al. Inhibitory effects of AE0047, a new dihydropyridine Ca(2+) channel blocker, on renal nerve stimulation-induced renal actions in anesthetized dogs. *J Pharmacol Exp Ther*. 2000 Jun;293(3):1040-7.

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