

AVE3085

## Chemical Properties

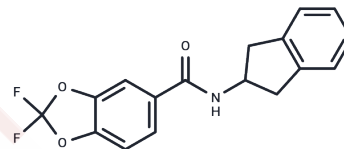
CAS No. : 450348-85-3

Formula: C<sub>17</sub>H<sub>13</sub>F<sub>2</sub>NO<sub>3</sub>

Molecular Weight: 317.29

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	AVE3085 is an endothelial nitric oxide synthase enhancer that restores endothelial function and reduces blood pressure in spontaneously hypertensive rats, used in cardiovascular disease research.
Targets(IC50)	NO Synthase
In vitro	AVE3085 (10 μM) at 37°C for 60 min significantly increased the expression of eNOS and p-eNOS (Ser1177) in coronary endothelial cells. [3]
In vivo	Treatment of spontaneously hypertensive rats (SHR) with AVE3085 (10 mg/kg/day, oral) for 4 weeks greatly improved endothelium-dependent relaxation of the aorta in SHR and reduced blood pressure in SHR. [1] AVE3085 (10 mg/kg/day, taken orally) improves endothelial dysfunction in db/db mice, thereby reducing oxidative stress in blood vessel walls. [2]

## Solubility Information

Solubility	DMSO: 200 mg/mL (630.34 mM), Sonication is recommended. ( < 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (10.4 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	3.1517 mL	15.7585 mL	31.5169 mL
5 mM	0.6303 mL	3.1517 mL	6.3034 mL
10 mM	0.3152 mL	1.5758 mL	3.1517 mL
50 mM	0.063 mL	0.3152 mL	0.6303 mL

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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

- Yang Q, et al. AVE3085, an enhancer of endothelial nitric oxide synthase, restores endothelial function and reduces blood pressure in spontaneously hypertensive rats. *Br J Pharmacol.* 2011 Jul;163(5):1078-85.
- Cheang WS, et al. Endothelial nitric oxide synthase enhancer reduces oxidative stress and restores endothelial function in db/db mice. *Cardiovasc Res.* 2011 Nov 1;92(2):267-75
- Xue HM, et al. New strategy of endothelial protection in cardiac surgery: use of enhancer of endothelial nitric oxide synthase. *World J Surg.* 2010 Jul;34(7):1461-9.

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