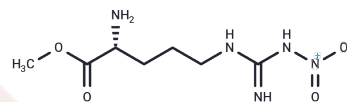


D-NAME (hydrochloride)

Chemical Properties

CAS No. :	50912-92-0
Formula:	C7H16ClN5O4
Molecular Weight:	269.69
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	N(G)-Nitro-D-arginine methyl ester (D-NAME) is the less active enantiomer of the nitric oxide (NO) synthase inhibitor N(G)-nitro-L-arginine methyl ester. D-NAME was initially thought to be inactive and was often used as a negative control for L-NAME. Later studies showed that D-NAME (40 mg/kg/day in rats) can have similar but less pronounced effects as L-NAME (40 mg/kg/day in rats) in the cardiovascular system, particularly at long-term timepoints. D-NAME (3-10 µg/mouse) had no effect on nociception in mice assessed using the tail flick test.
Targets(IC50)	Others,NO Synthase

Solubility Information

Solubility	PBS (pH 7.2): 10 mg/mL (37.08 mM),Sonication is recommended. DMF: 20 mg/mL (74.16 mM),Sonication is recommended. DMSO: 20 mg/mL (74.16 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	3.708 mL	18.5398 mL	37.0796 mL
5 mM	0.7416 mL	3.708 mL	7.4159 mL
10 mM	0.3708 mL	1.854 mL	3.708 mL
50 mM	0.0742 mL	0.3708 mL	0.7416 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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- Chinellato, A., Frolidi, G., Caparota, L., et al. Pharmacological characterization of endothelial cell nitric oxide synthase inhibitors in isolated rabbit aorta *Life Sci.* 62(6), 479-490 (1998).
- Babál, P., Pechánová, O., and Bernátová, I. Long-term administration of D-NAME induces hemodynamic and structural changes in the cardiovascular system *Physiol. Res.* 49(1), 47-54 (2000).
- Kawabata, A., Umeda, N., and Takagaki, H. L-arginine exerts a dual role in nociceptive processing in the brain: Involvement of the kyotorphin-Met-enkephalin pathway and NO-cyclic GMP pathway *Br. J. Pharmacol.* 109(1), 73-79 (1993).

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