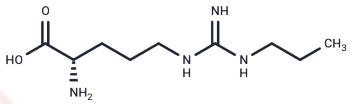
Data Sheet (Cat.No.T38786)

TargetMol

Nω-Propyl-L-arginine

Chemical Properties



CAS No. : 137361-05-8

Formula: C9H20N4O2

Molecular Weight: 216.28

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	Nω-Propyl-L-arginine, a powerful and specific inhibitor of neuronal nitric oxide synthase (nNOS), effectively inhibits nNOS with a Ki of 57 nM. It exhibits a remarkable 149-fold selectivity for nNOS over endothelial NOS (eNOS).
Targets(IC50)	Others,NO Synthase
In vivo	Nω-Propyl-L-arginine (N-omega-Propyl-L-arginine), administered intraperitoneally at 20 mg/kg, significantly mitigates phencyclidine-induced prepulse inhibition disruption and increased locomotor activity in 30-40 g male NMRI mice, underscoring its potential to reduce behavioral disturbances.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.6236 mL	23.1182 mL	46.2364 mL
5 mM	0.9247 mL	4.6236 mL	9.2473 mL
10 mM	0.4624 mL	2.3118 mL	4.6236 mL
50 mM	0.0925 mL	0.4624 mL	0.9247 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

Zhang HQ, et al. Potent and selective inhibition of neuronal nitric oxide synthase by N omega-propyl-L-arginine. J Med Chem. 1997 Nov 21;40(24):3869-70.
Klamer D, et al. The neuronal selective nitric oxide synthase inhibitor, Nomega-propyl-L-arginine, blocks the effects of phencyclidine on prepulse inhibition and locomotor activity in mice. Eur J Pharmacol. 2004 Oct 25;503(1-3):103-7.

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