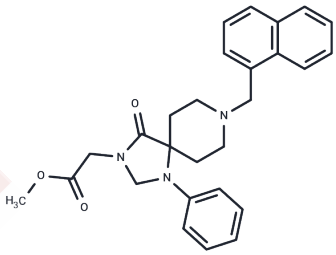
Data Sheet (Cat.No.T23074)

TargetMol

NNC 63-0532

Chemical Properties



CAS No. : 250685-44-0

Formula: C27H29N3O3

Molecular Weight: 443.54

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	NNC 63-0532 is a potentnociceptin receptor agonist, Ki=7.3 nM, EC50=305 nM.
Targets(IC50)	Opioid Receptor
In vitro	NNC 63-0532 (5 μM) inhibited the epileptiform activity induced by picrotoxin in the entorhinal cortex[2].

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 20 mg/mL (45.09 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (9.02 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2546 mL	11.2729 mL	22.5459 mL
5 mM	0.4509 mL	2.2546 mL	4.5092 mL
10 mM	0.2255 mL	1.1273 mL	2.2546 mL
50 mM	0.0451 mL	0.2255 mL	0.4509 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

Thomsen C, Hohlweg R. (8-Naphthalen-1-ylmethyl-4-oxo-1-phenyl-1,3,8-triaza-spiro[4. 5]dec-3-yl)-acetic acid methyl ester (NNC 63-0532) is a novel potent nociceptin receptor agonist. Br J Pharmacol. 2000 Nov;131(5):903-8.
Li H, et al. Roles of K+ and cation channels in ORL-1 receptor-mediated depression of neuronal excitability and epileptic activities in the medial entorhinal cortex. Neuropharmacology. 2019 Jun;151:144-158.