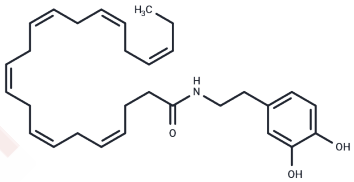
Data Sheet (Cat.No.T11079)

TargetMol

NMI 8739

Chemical Properties



CAS No. : 129024-87-9

Formula: C30H41NO3

Molecular Weight: 463.65

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	NMI 8739 (n-docosahexaenoyl dopamine) is an agonist of D2 autoreceptor. NMI 8739 reduces NO production and elicits concentration-dependent suppression of CCL-20, MCP-1 and IL-6 release.
Targets(IC50)	Dopamine Receptor
In vitro	NMI 8739 (2 μM) significantly inhibits IL-6 and CCL-20 release up to 49% and 37%, respectivel. NMI 8739 suppresses the production of PGE2 in a concentration-dependent manner with 25.3%, 75% reduction at doses of 100 nM and 1 μM, respectively[2].

Solubility Information

Solubility	Ethanol: 90 mg/mL (194.11 mM),Sonication is recommended. DMSO: 90 mg/mL (194.11 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: 3.3 mg/mL (7.12 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	2.1568 mL	10.784 mL	21.568 mL
5 mM	0.4314 mL	2.1568 mL	4.3136 mL
10 mM	0.2157 mL	1.0784 mL	2.1568 mL
50 mM	0.0431 mL	0.2157 mL	0.4314 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

Shashoua VE, et al. N-docosahexaenoyl, 3 hydroxytyramine: a dopaminergic compound that penetrates the blood-brain barrier and suppresses appetite. Life Sci. 1996;58(16):1347-57.
Wang Y, et al. N-Docosahexaenoyl Dopamine, an Endocannabinoid-like Conjugate of Dopamine and the n-3 Fatty Acid Docosahexaenoic Acid, Attenuates Lipopolysaccharide-Induced Activation of Microglia and Macrophages via COX-2. ACS Chem Neurosci. 2017 Mar 15;8(3):548-557.
Gill Higgins. New drugs signal rapid growth of anti-obesity drug market. RESEARCH & DEVELOPMENT. 2 Nov 11K16 No. 1061