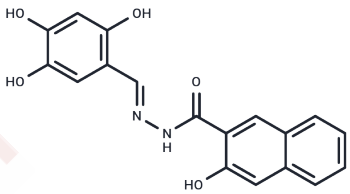
Data Sheet (Cat.No.T6822)

TargetMol

Hydroxy-Dynasore

Chemical Properties



CAS No. : 1256493-34-1

Formula: C18H14N2O5

Molecular Weight: 338.31

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	Hydroxy-Dynasore (Dyngo-4a) , a effective dynamin inhibitor, inhibits withDynI (brain), DynI (rec), and DynII (rec) of IC50 of 0.38 μM, 1.1 μM, and 2.3 μM, respectively.
Targets(IC50)	Dynamin
In vitro	Dyngo-4a inhibits dynamin-dependent endocytosis of transferrin in multiple cell types with IC?? of 5.7 μM, and reduces synaptic vesicle endocytosis and activity-dependent bulk endocytosis in cultured neurons and synaptosomes. [1] In motor nerve terminals and cultured hippocampal neurons, Dyngo-4a blocks Alexa Fluor 488-BoNT/A-Hc internalization. [2] In Drosophila S2R+ cells, Dyngo-4a causes a decrease in the level of Armadillo/β-catenin. [3]

Solubility Information

Solubility	DMSO: 45 mg/mL (133.01 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: 2 mg/mL (5.91 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	2.9559 mL	14.7793 mL	29.5587 mL
5 mM	0.5912 mL	2.9559 mL	5.9117 mL
10 mM	0.2956 mL	1.4779 mL	2.9559 mL
50 mM	0.0591 mL	0.2956 mL	0.5912 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

McCluskey A, et al. Traffic. 2013, 14(12), 1272-1289.
Quanzhi Zhang 1,a,b, Qiuhan Zhang 1,b, Zhichao Xu c, Qi Tang b, Xinjin Liu b, Danping Niu b, Xiaoming Gao a, Ke Lan b,*, Shuwen Wu. Dyngo-4a protects mice from rotavirus infection by affecting the formation of dynamin 2 oligomers. Science Bulletin. 2020
Harper CB, et al. J Biol Chem. 2011, 286(41), 35966-35976.
Gagliardi M, et al. J Cell Sci. 2014, 127(22), 4918-4926.
. Dyngo-4a protects mice from rotavirus infection by affecting the formation of dynamin 2 oligomers. Science Bulletin. 2020