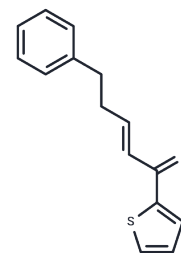


CAY10786

Chemical Properties

CAS No. : 1239987-91-7
 Formula: C₁₅H₁₄O₅
 Molecular Weight: 242.34
 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	CAY10786 (GPR52 antagonist-1) is an antagonist of G protein-coupled receptor 52 (GPR52, IC ₅₀ = 0.63 μM).
Targets(IC ₅₀)	Others, GPCR
In vitro	CAY10786 reduces mutant huntingtin (mHTT) protein levels in SHDhQ7/Q111 cells in a concentration-dependent manner. CAY10786 (3 μM) reduces apoptosis induced by growth factor deprivation in primary striatal neurons[1].
In vivo	In the homozygous HdhQ140 mouse model of Huntington's disease, CAY10786 (5 mg/kg) increases the latency to fall in the rotarod test and decreases striatal levels of soluble and insoluble mHTT[1].

Solubility Information

Solubility	Chloroform: 10 mg/mL (41.26 mM), Sonication is recommended. DMSO: 245 mg/mL (1010.98 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: 5 mg/mL (20.63 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.1264 mL	20.6322 mL	41.2643 mL
5 mM	0.8253 mL	4.1264 mL	8.2529 mL
10 mM	0.4126 mL	2.0632 mL	4.1264 mL
50 mM	0.0825 mL	0.4126 mL	0.8253 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

Wang, C., Zhang, Y.-F., Guo, S., et al. GPR52 antagonist reduces huntingtin levels and ameliorates Huntington's disease-related phenotypes. *J. Med. Chem.* 64(2)941-957(2021)

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