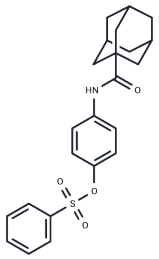
Data Sheet (Cat.No.T67775)

TargetMol

Enpp/Carbonic anhydrase-IN-1

Chemical Properties



CAS No. : 2883495-35-8

Formula: C23H25NO4S

Molecular Weight: 411.51

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	Enpp/Carbonic anhydrase-IN-1 (compound 1e) is a potent inhibitor of Enpp and carbonic anhydrase, exhibiting IC50s of 1.36, 1.35, 3.00, 0.88, and 1.02 μM for NPP1, NPP2, NPP3, CA-II, and CA-IX respectively. Enpp/Carbonic anhydrase-IN-1 also demonstrates selective antiproliferative activity for cancer cells.
Targets(IC50)	Apoptosis,Carbonic Anhydrase,PDE
In vitro	Enpp/Carbonic anhydrase-IN-1 (0-100 μM;) inhibits cancer cells growth with IC50s of 0.32, 0.40, 0.40, 0.58, 0.87, 0.96 μM for K-562, RPMI-8226, HT-29, SR, COLO 205, SF-539 cells, respectively. Enpp/Carbonic anhydrase-IN-1 (0-2 μM) exhibits low cytotoxic against normal skin fibroblast cells (F180) and normal breast epithelial cells (HME1) with IC50s of > 50 μM. Enpp/Carbonic anhydrase-IN-1 (0.32 μM, 0.64 μM) induces apoptosis in a dose-dependent manner at K-562 cells[1].

Solubility Information

Solubility	DMSO: 90 mg/mL (218.71 mM),Sonication and heating to 50°C are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 3.3 mg/mL (8.02 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	2.4301 mL	12.1504 mL	24.3007 mL
5 mM	0.486 mL	2.4301 mL	4.8601 mL
10 mM	0.243 mL	1.215 mL	2.4301 mL
50 mM	0.0486 mL	0.243 mL	0.486 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

Afnan I.Shahin, et al. Design and synthesis of new adamantyl derivatives as promising antiproliferative agents. European Journal of Medicinal Chemistry, 2022.