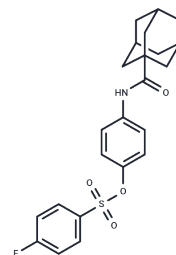


Enpp/Carbonic anhydrase-IN-2

Chemical Properties

CAS No. :	2883495-39-2
Formula:	C ₂₃ H ₂₄ FNO ₄ S
Molecular Weight:	429.5
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Enpp/Carbonic anhydrase-IN-2 is a potent dual inhibitor of Enpp and carbonic anhydrase, inhibiting NPP1, NPP2, NPP3, CA-IX, CA-XII, with IC ₅₀ values of 1.13, 1.07, 0.74, 0.33, 0.68, respectively. Enpp/Carbonic anhydrase-IN-2 induced apoptosis. Enpp/Carbonic anhydrase-IN-2 has antiproliferative activity against cancer cells and low cytotoxicity against normal cells.
Targets(IC ₅₀)	Apoptosis, PDE, Carbonic Anhydrase
In vitro	Enpp/Carbonic anhydrase-IN-2 (compound 1i) (0-2 μM) shows low cytotoxic against normal breast epithelial cells (HME1) and normal skin fibroblast cells (F180) with IC₅₀s of > 50 μM.[1] Enpp/Carbonic anhydrase-IN-2 (0-100 μM) inhibits some cancer cells growth with IC₅₀s of 0.58, 0.58, 0.63, 0.42, 0.20, 0.72, 0.41, 0.76, 0.94, 0.28, 0.49, 0.59, 0.83 μM for K-562, COLO 205, HCT-116, HCT-15, HT29, KM12, SW-620, SF-539, NCI/ADR-RES, A498, PC-3, MCF7, T-47D cells, respectively.[1] Enpp/Carbonic anhydrase-IN-2 (0.58, 1.16 μM) induces apoptosis in a dose-dependent manner at K-562 cells.[1]

Solubility Information

Solubility	DMSO: 42.95 mg/mL (100 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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A DRUG SCREENING EXPERT

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3283 mL	11.6414 mL	23.2829 mL
5 mM	0.4657 mL	2.3283 mL	4.6566 mL
10 mM	0.2328 mL	1.1641 mL	2.3283 mL
50 mM	0.0466 mL	0.2328 mL	0.4657 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.

Reference

Shahin AI, et al. Design and synthesis of new adamantyl derivatives as promising antiproliferative agents. Eur J Med Chem. 2023 Jan 15;246:114958.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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