

SLC7A11-IN-1

Chemical Properties

CAS No. : 3049302-90-8

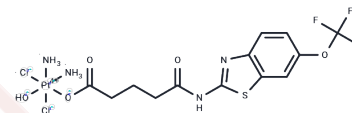
Formula: C₁₃H₁₇Cl₂F₃N₄O₅PtS

Molecular Weight: 664.35

Store at low temperature

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	SLC7A11-IN-1 is an SLC7A11 inhibitor with anti-proliferative and anti-cancer activities. It inhibits cell invasion and metastasis, induces apoptosis and cell cycle arrest. It can be used for research on neurodegenerative diseases.
Targets(IC50)	Apoptosis
In vitro	SLC7A11-IN-1 (compound 2) (0-100 μM; 72 hrs of action) exhibited antiproliferative activity against a variety of cell lines with IC50 values of HCT-116: 0.03 μM, MDA-MB-231: 0.11 μM, MCF-7: 0.18 μM, HepG2: 0.17 μM, LO2: 0.27 μM.[1] SLC7A11-IN-1 (0.5 μM, treated for 24 h) inhibited the invasive and migratory abilities of HCT-116 cells, triggered apoptosis, and arrested the cell cycle in S-phase, as well as significantly reduced intracellular GSH levels, while significantly increasing the expression of reactive oxygen species (ROS). [1] SLC7A11-IN-1 (1 μM, 15 hr treatment) significantly induced DNA damage in HCT-116 cells and upregulated the expression of related proteins. [1]
In vivo	SLC7A11-IN-1 (2 mg/kg via tail vein injection every three days for three consecutive times) exhibited tumor growth inhibition in mice. [1]

Solubility Information

Solubility	DMSO: 16 mg/mL (24.08 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5052 mL	7.5262 mL	15.0523 mL
5 mM	0.301 mL	1.5052 mL	3.0105 mL
10 mM	0.1505 mL	0.7526 mL	1.5052 mL
50 mM	0.0301 mL	0.1505 mL	0.301 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

Li Z, et al. Blocking xCT and PI3K/Akt pathway synergized with DNA damage of Riluzole-Pt(IV) prodrugs for cancer treatment. Eur J Med Chem. 2023 Mar 15;250:115233.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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