

TfR-1-IN-1

Chemical Properties

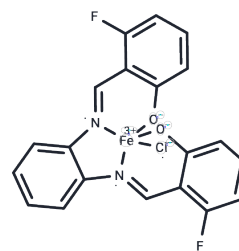
CAS No. : 1643444-62-5

Formula: C₂₀H₁₂ClF₂FeN₂O₂

Molecular Weight: 441.62

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	TfR-1-IN-1 is a transferrin receptor 1 (TfR-1) inhibitor, also an Fe(III) salivary phenol complex, with anticancer activity. It induces apoptosis, inhibits the growth of tumor cells and normal cells, and is used in studies of leukemia.
Targets(IC50)	Ferroptosis
In vitro	TfR-1-IN-1 significantly decreased the metabolic activity of ovarian cancer (A2780cis), breast cancer (MDA-MB 231) and leukemia (HL-60) cell lines, with IC50 values of 0.51, 0.46 and 0.48 μM, respectively. [1]

Solubility Information

Solubility	DMSO: 10 mg/mL (22.64 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	2.2644 mL	11.322 mL	22.6439 mL
5 mM	0.4529 mL	2.2644 mL	4.5288 mL
10 mM	0.2264 mL	1.1322 mL	2.2644 mL
50 mM	0.0453 mL	0.2264 mL	0.4529 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

Bernkop-Schnürch AD, et al. Transferrin Receptor-Mediated Cellular Uptake of Fluorinated Chlorido[N,N'-bis(salicylidene)-1,2-phenylenediamine]iron(III) Complexes. ACS Omega. 2024 Aug 5;9(33):35394-35407.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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