

GPX4-IN-5

Chemical Properties

CAS No. : 2922824-09-5

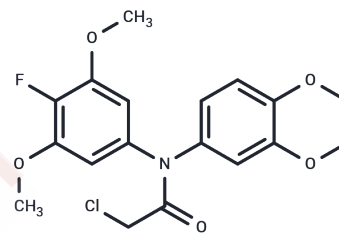
Formula: C₁₈H₁₇ClFNO₅

Molecular Weight: 381.78

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	GPX4-IN-5 is a small molecule covalent GPX4 inhibitor (IC ₅₀ : 0.12 μM) with antitumour activity. GPX4-IN-5 induces ferroptosis and can be used for the prevention and treatment of triple-negative breast cancer (TNBC).
Targets(IC ₅₀)	Ferroptosis, Glutathione Peroxidase, GPX

Solubility Information

Solubility	DMSO: 80 mg/mL (209.54 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: 3.3 mg/mL (8.64 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	2.6193 mL	13.0965 mL	26.1931 mL
5 mM	0.5239 mL	2.6193 mL	5.2386 mL
10 mM	0.2619 mL	1.3097 mL	2.6193 mL
50 mM	0.0524 mL	0.2619 mL	0.5239 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

Chen T, et al. Discovery of Novel Potent Covalent Glutathione Peroxidase 4 Inhibitors as Highly Selective Ferroptosis Inducers for the Treatment of Triple-Negative Breast Cancer. J Med Chem. 2023 Jul 27;66(14):10036-10059.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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