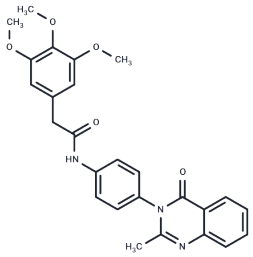
Data Sheet (Cat.No.T77344)

TargetMol

icFSP1

Chemical Properties



CAS No. : 1115910-36-5

Formula: C26H25N3O5

Molecular Weight: 459.49

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	icFSP1 is a mitochondria-associated apoptosis-inducing factor regulator with antitumor activity for the study and treatment of tumor diseases.
Targets(IC50)	Apoptosis,Ferroptosis,Glutathione Peroxidase
In vitro	icFSP1(5μM) triggers subcellular relocalization of FSP1 from the membrane and FSP1 condensation before ferroptosis induction, in synergism with GPX4 inhibition[1].
In vivo	In a tumour-bearing mouse model, icFSP1(i.p.) significantly inhibited tumour growth and decreased tumour weight, without affecting body weight. icFSP1 markedly increased the abundance of hFSP1 condensates and immunoreactivity to 4-hydroxynonenal, a lipid peroxidation breakdown product[1].

Solubility Information

Solubility	DMSO: 55 mg/mL (119.7 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: 2 mg/mL (4.35 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	2.1763 mL	10.8816 mL	21.7633 mL
5 mM	0.4353 mL	2.1763 mL	4.3527 mL
10 mM	0.2176 mL	1.0882 mL	2.1763 mL
50 mM	0.0435 mL	0.2176 mL	0.4353 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

Nakamura T, et al. Phase separation of FSP1 promotes ferroptosis. Nature. 2023;619(7969):371-377.