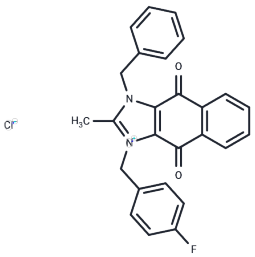
Data Sheet (Cat.No.T72658)

TargetMol

cRIPGBM chloride

Chemical Properties



CAS No. : 2361988-77-2

Formula: C26H20ClFN2O2

Molecular Weight: 446.9

Storage: Store at low temperature
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	cRIPGBM chloride is an apoptosis-promoting derivative present in GBM cancer stem cells with antitumor activity. It induces caspase-1 dependent cell apoptosis by interacting with receptor-interacting protein kinase 2 (RIPK2) and acting as a molecular switch. cRIPGBM chloride reduces the formation of pro-survival RIPK2/TAK1 complexes and increases the formation of pro-apoptotic RIPK2/caspase 1 complexes, which can be used to study brain tumors.
Targets(IC50)	Apoptosis,Caspase,RIP kinase
In vitro	cRIPGBM chloride induces Caspase-1 dependent apoptosis by binding to receptor interacting protein kinase 2 (RIPK2) and acting as a molecular switch, EC50 = 68 nM. Thus, the formation of pro-survival RIPK2/TAK1 complex was decreased and the formation of pro-apoptotic RIPK2/caspase 1 complex was increased. [1]
In vivo	In a mouse model of intracranial GBM CSC tumor xenotransplantation in situ, cRIPGBM chloride (20 mg/kg oral) was found to significantly inhibit tumor formation in vivo. [1]

Solubility Information

Solubility	DMSO: 16 mg/mL (35.8 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2376 mL	11.1882 mL	22.3764 mL
5 mM	0.4475 mL	2.2376 mL	4.4753 mL
10 mM	0.2238 mL	1.1188 mL	2.2376 mL
50 mM	0.0448 mL	0.2238 mL	0.4475 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

Lucki NC, et al. A cell type-selective apoptosis-inducing small molecule for the treatment of brain cancer. Proc Natl Acad Sci U S A. 2019 Mar 26;116(13):6435-6440.