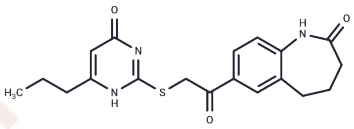
Data Sheet (Cat.No.T61485)

TargetMol

S07-2010

Chemical Properties



CAS No. : 1223194-71-5

Formula: C19H21N3O3S

Molecular Weight: 371.45

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	S07-2010 is an AKR1C3 inhibitor with potential anti-cancer activity, suppressing AKR1C3, AKR1C4, AKR1C1, and AKR1C2, inducing apoptosis in A549/DDP cells. S07-2010 exhibits significant cytotoxicity in MCF-7/DOX and A549/DDP.
Targets(IC50)	Others,Reductase,NADPH
In vitro	S07-2010 (0-25 μM, 48h) was shown to be cytotoxic to MCF-7/DOX and A549/DDP with IC50 = 127.5 and 5.51 μM. In A549/DDP cells, S07-2010 can significantly reverse cancer cell resistance to DDP and inhibit tumor proliferation at low concentrations. In A549/DDP cells, the CI values of S07-2010 ranged from 0.2 to 0.6, indicating a strong synergistic drug effect in the combination therapy. S07-2010 (25 μM) can induce apoptosis of tumor cells. [1]

Solubility Information

Solubility	DMSO: 30 mg/mL (80.76 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 (5.38 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	2.6922 mL	13.4608 mL	26.9215 mL
5 mM	0.5384 mL	2.6922 mL	5.3843 mL
10 mM	0.2692 mL	1.3461 mL	2.6922 mL
50 mM	0.0538 mL	0.2692 mL	0.5384 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

He S, et al. Discovery of Novel Aldo-Keto Reductase 1C3 Inhibitors as Chemotherapeutic Potentiators for Cancer Drug Resistance. ACS Med Chem Lett. 2022 Jul 8;13(8):1286-1294.