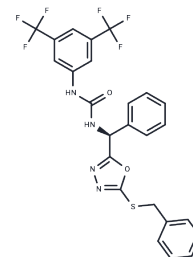


RECQL5-IN-1

Chemical Properties

CAS No. :	2718170-45-5
Formula:	C ₂₅ H ₁₈ F ₆ N ₄ O ₂ S
Molecular Weight:	552.49
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	RECQL5-IN-1 is an orally active RECQL5 inhibitor (IC ₅₀ = 46.3 nM) that simultaneously targets both enzymatic and non-enzymatic domains. RECQL5-IN-1 stabilizes the interaction between RECQL5 and RAD51 proteins, disrupting homologous recombination repair (HRR), thereby selectively killing cancer cells that express RECQL5.
Targets(IC ₅₀)	DNA/RNA Synthesis
In vitro	Methods: RECQL5-IN-1 (0, 10, 20 μM) was added to MCF-7 cells, which were incubated for 72 hours; apoptosis was then assessed by flow cytometry. Results: RECQL5-IN-1 significantly induced apoptosis in MCF-7 cells. [1]
In vivo	Methods: To investigate the antitumor efficacy of RECQL5-IN-1, Nude mice were subcutaneously inoculated with MCF-7 RECQL5-WT cells and administered RECQL5-IN-1 (50 mg/kg) orally via gavage every other day for a total of 30 days. Results: RECQL5-IN-1 significantly inhibited the growth of RECQL5-WT tumors. [1]

Solubility Information

Solubility	DMSO: 200 mg/mL (362 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	1.810 mL	9.0499 mL	18.0999 mL
5 mM	0.362 mL	1.810 mL	3.620 mL
10 mM	0.181 mL	0.905 mL	1.810 mL
50 mM	0.0362 mL	0.181 mL	0.362 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

Chakraborty S, et al. Targeting RECQL5 Functions, by a Small Molecule, Selectively Kills Breast Cancer in Vitro and in Vivo. J Med Chem. 2021;64(3):1524-1544.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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