

HEMTAC WEE1 degrader-1

Chemical Properties

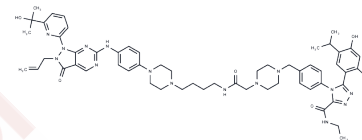
CAS No. : 3002417-64-0

Formula: C57H71N15O6

Molecular Weight: 1062.27

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	HEMTACWEE1degrader-1 is a WEE1-targeting heterobifunctional chimeric degrader (HEMTAC) facilitated by HSP90, exhibiting an HSP90 enzyme inhibitory activity with an IC50 of 16.76 nM. It enhances the ubiquitination and subsequent degradation of WEE1, effectively blocking the G2/M cell cycle transition. This compound shows anticancer properties in patient-derived xenograft (PDX) models of acute myeloid leukemia (AML). HEMTACWEE1degrader-1 is utilized in AML research.
Targets(IC50)	HSP,Wee1
In vitro	HEMTAC WEE1 degrader-1 (Compound 9c) effectively inhibits the proliferation of MV-4-11 cells (IC50: 8.08 nM) and primary AML cells (IC50: 4.77 nM) over 72 hours. Within a range of 0.01-10 μM over 12 hours, it degrades WEE1 protein in MV-4-11 cells with minimal impact on AKT protein, indicating action independent of HSP90 inhibition. Additionally, concentrations from 0.1-10 μM over 12 hours lead to a concentration-dependent increase in WEE1 mRNA expression in MV-4-11 cells. At concentrations of 3-30 nM over 72 hours, it induces G2/M phase cell cycle arrest in MV-4-11 cells in a concentration-dependent manner.
In vivo	The compound HEMTAC WEE1 degrader-1 (Compound 9c), administered intravenously at a dose of 3 mg/kg once daily for four weeks, demonstrates anticancer efficacy with minimal toxicity in a mouse AML patient-derived xenograft (PDX) model. Additionally, in healthy mice, HEMTAC WEE1 degrader-1 (10 mg/kg, intravenously, once daily for three days) exhibits mild bone marrow suppression toxicity.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.9414 mL	4.7069 mL	9.4138 mL
5 mM	0.1883 mL	0.9414 mL	1.8828 mL
10 mM	0.0941 mL	0.4707 mL	0.9414 mL
50 mM	0.0188 mL	0.0941 mL	0.1883 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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