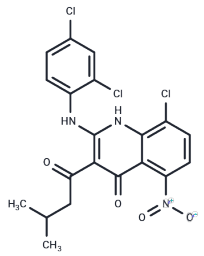
Data Sheet (Cat.No.T15611)

TargetMol

JH-RE-06

Chemical Properties



CAS No. : 1361227-90-8

Formula: C20H16Cl3N3O4

Molecular Weight: 468.72

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	JH-RE-06 disrupts mutagenic translesion synthesis (TLS) by preventing the recruitment of mutagenic POLζ. JH-RE-06 is an effective REV1-REV7 interface inhibitor (IC50=0.78 μM; Kd=0.42 μM), which targets REV1 that interacts with the REV7 subunit of POLζ. JH-RE-06 also improves chemotherapy.
Targets(IC50)	DNA/RNA Synthesis
In vitro	JH-RE-06 unexpectedly causes dimerization of the REV1 CTD at its REV7-binding surface. It also blocks the REV1-REV7 interaction.
In vivo	In mice, co-administration of JH-RE-06 with cisplatin inhibits the growth of xenograft human melanomas. JH-RE-06 suppresses mutagenic TLS and increases cisplatin-induced toxicity in cultured human and mouse cell lines [1].

Solubility Information

Solubility	DMSO: 10.91 mg/mL (23.28 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1335 mL	10.6673 mL	21.3347 mL
5 mM	0.4267 mL	2.1335 mL	4.2669 mL
10 mM	0.2133 mL	1.0667 mL	2.1335 mL
50 mM	0.0427 mL	0.2133 mL	0.4267 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

Wojtaszek JL, et al. A Small Molecule Targeting Mutagenic Translesion Synthesis Improves Chemotherapy. Cell. 2019 Jun 27;178(1):152-159.e11.
Chen Y, Jie X, Xing B, et al. REV1 promotes lung tumorigenesis by activating the Rad18/SERTAD2 axis. Cell Death & Disease. 2022, 13(2): 1-11.
Chen Y, Jie X, Xing B, et al. REV1 promotes lung tumorigenesis by activating the Rad18/SERTAD2 axis. Cell Death & Disease. 2022, 13(2): 1-11.
REV1-POLç Inhibition Enhances Cisplatin-Induced Cytotoxicity. Cancer Discov. 2019 Aug;9(8):OF17.
Chen Y, Feng X, Wu Z, et al.USP9X-mediated REV1 deubiquitination promotes lung cancer radioresistance via the action of REV1 as a Rad18 molecular scaffold for cystathionine γ-lyase.Journal of Biomedical Science.2024, 31(1): 55.