Proteins

Product Data Sheet

JH-RE-06

Cat. No.: HY-126214

CAS No.: 1361227-90-8 Molecular Formula: $C_{20}H_{16}Cl_3N_3O_4$

Molecular Weight: 468.72

Target: DNA/RNA Synthesis Pathway: Cell Cycle/DNA Damage

Storage: Powder -20°C 3 years

In solvent -80°C 6 months

> -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 5 mg/mL (10.67 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	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

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description	JH-RE-06, a potent REV1-REV7 interface inhibitor (IC $_{50}$ =0.78 μ M; K $_{d}$ =0.42 μ M), targets REV1 that interacts with the REV7 subunit of POL ζ . JH-RE-06 disrupts mutagenic translesion synthesis (TLS) by preventing recruitment of mutagenic POL ζ . JH-RE-06 improves chemotherapy ^{[1][2]} .
IC ₅₀ & Target	IC50: 0.78 μ M (REV1-REV7) $^{[1]}$ Kd: 0.42 μ M (REV1-REV7) $^{[1]}$
In Vitro	JH-RE-06 unexpectedly induces dimerization of the REV1 CTD at its REV7-binding surface and blocks the REV1-REV7 interaction ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	JH-RE-06 inhibits mutagenic TLS and enhances cisplatin-induced toxicity in cultured human and mouse cell lines ^[1] . Co-administration of JH-RE-06 with cisplatin suppresses the growth of xenograft human melanomas in mice ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

• Research Square Preprint. 2023 Jun 27.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Wojtaszek JL, et al. A Small Molecule Targeting Mutagenic Translesion Synthesis Improves Chemotherapy. Cell. 2019 Jun 27;178(1):152-159.e11.
- [2]. REV1-POLς Inhibition Enhances Cisplatin-Induced Cytotoxicity. Cancer Discov. 2019 Aug;9(8):OF17.

Caution: Product has not been fully validated for medical applications. For research use only.

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