

Data Sheet

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Product Name : COUP-TFII inhibitor CIA1

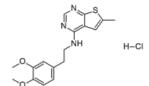
 Cat. No.
 : PC-38207

 CAS No.
 : 1049691-47-5

 Molecular Formula : C₁₇H₂₀CIN₃O₂S

 Molecular Weight : 365.876

Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

CIA1 (COUP-TFII inhibitor A1) is a potent and specific inhibitor of **COUP-TFII** activity, inhibits COUP-TFII–driven NGFIA reporter expression with IC50 of 3.2 uM, disturbs COUP-TFII binding to FOXA1 to regulate target gene expression. CIA1 repressed NGFIA reporter expression in a COUP-TFII–dependent manner, as COUP-TFII knockdown abrogated CIA1-induced inhibition.

CIA1 directly interacts with COUP-TFII protein, CIA1 treatment resulted in a thermal stabilization of COUP-TFII. CIA1 inhibited growth of multiple prostate cancer cell lines including androgen-sensitive LNCaP cells, AR-negative PC3 cells, as well as CRPC C4-2, abl, and AR variant 22Rv1 cells with IC50 of 1.2 to 7.6 uM, also notably inhibited the colony formation ability of prostate cancer cells in a dose-dependent manner.

COUP-TFII inhibitor CIA1 can phenocopy COUP-TFII silencing, with no apparent effect COUP-TFII protein levels, disturbed COUP-TFII target genes in tumor samples, including induced FOXM1, CDK1, and repressed p21.

COUP-TFII inhibitor CIA1 (2.6 mg/kg, i.p.) inhibited prostate cancer tumor growth in PC3 xenograft in the mice that bear PC3 xenograft, with limited toxicity.

References

Leiming Wang, et al. *Sci Adv.* 2020 Apr 29;6(18):eaaz8031.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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