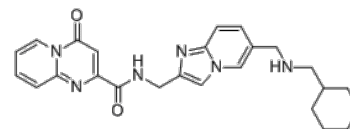


Product Name : STM2457
Cat. No. : PC-38285
CAS No. : 2499663-01-1
Molecular Formula : C₂₅H₂₈N₆O₂
Molecular Weight : 444.539
Target : DNA Methyltransferase (DNMT)
Solubility : 10 mM in DMSO



Biological Activity

STM2457 (STM-2457) is a highly potent, selective first-in-class catalytic inhibitor of **METTL3** with IC₅₀ of 16.9 nM, binds to the **METTL3-METTL14** with K_d of 1.4 nM.

Treatment of STM2457 leads to reduced AML growth and an increase in differentiation and apoptosis.

STM2457 reduces m6A levels on known leukaemogenic mRNAs and decrease in their expression consistent with a translational defect.

STM2457 impaired engraftment and prolonged survival in various mouse models of AML, specifically targeting key stem cell subpopulations of AML.

References

Yankova E, et al. *Nature*. 2021 May;593(7860):597-601.

Xu QC, et al. *Oncogene*. 2022 Jan 29. doi: 10.1038/s41388-022-02185-1.

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

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