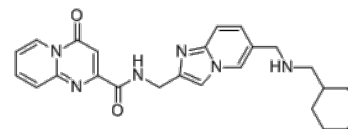


Product Name : STM2457
Cat. No. : PC-38285
CAS No. : 2499663-01-1
Molecular Formula : C₂₅H₂₈N₆O₂
Molecular Weight : 444.539
Target : DNA Methyltransferase (DNMT)
Solubility : 10 mM in DMSO



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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