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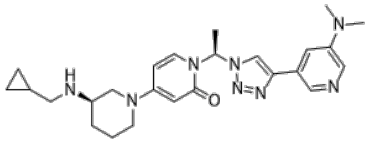
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	EP652
Cat. No.	:	PC-24016
CAS No.	:	3050819-22-9
Molecular Formula	:	$C_{25}H_{34}N_8O$
Molecular Weight	:	462.60
Target	:	Histone Methyltransferase (HMTase)
Solubility	:	10 mM in DMSO



CAS: 3050819-22-9

Biological Activity

EP652 is a potent, selective and in vivo active inhibitor of RNA methyltransferase **METTL3** with IC50 of 2 nM (METTL3/14) in SPA primary assays.
EP652 dispalys high selectivity (at 10 μM) against a panel of 40 methyltransferases, as well as in a standard safety screen panel (44 targets, including GPCRs, ion channels, and kinases).
EP652 exhibits m6A inhibition in mRNA from Calu-6 after 24 h treatment with IC50 of 8.6 nM.
EP652 demonstrates potent efficacy in cellulo across various cell lines in Kasumi-1 and MV-4–11 (AML cell lines), Caov-3 and SK-OV-3 (ovarian cancer cell lines), Calu-6 and A549 (lung cancer cell lines), and FaDu (Head and neck cancer cell line)) in cell viability experiments.
EP652 demonstrates dose-dependent decrease of the m6A cellular level in PBMC from rates, maximum m6A reduction (~75%) at as low as 0.3 mg/kg.
EP652 (10 and 30 mg/kg ip, QD) effectively arrested cancer progression in MV-4-11 model (MV-4-11-Luc-mCh-Puro CDX model).

References

Dutheuil G, et al. ***J Med Chem***. 2025 Feb 13;68(3):2981-3003.

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

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