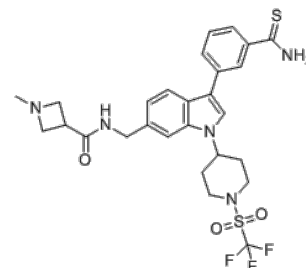

Product Name	: ASH1L inhibitor AS-99
Cat. No.	: PC-72494
CAS No.	: 2323623-93-2
Molecular Formula	: C ₂₇ H ₃₀ F ₃ N ₅ O ₃ S ₂
Molecular Weight	: 593.684
Target	: Histone Methyltransferase (HMTase)
Solubility	: 10 mM in DMSO



Biological Activity

ASH1L inhibitor AS-99 (AS-99) is a first-in-class, potent, selective inhibitor of **ASH1L** histone methyltransferase with IC₅₀ of 0.79 μM.

AS-99 strongly bind to the ASH1L SET domain with K_d values of 0.89 μM.

AS-99 displayed no significant inhibition (>100-fold selectivity) at 50 μM against a panel of 20 histone methyltransferases, including NSD1, NSD2, NSD3, and SETD2.

AS-99 inhibits the growth of leukemia cells (MV4;11, MOLM13, and KOPN8) harboring different MLL1 translocations with the GI₅₀ values of 1.8-3.6 μM, showed a several fold weaker effect on the proliferation of leukemia cells without MLL1 translocations, such as SET2 and K562, without toxicity in normal cells.

AS-99 impairs transcriptional program of MLL fusion proteins and reduces leukemia burden.

AS-99 reduced the leukemia burden in the xenotransplantation mouse model of MLL leukemia without affecting blood counts in normal mice.

References

David S Rogawski, et al. *Nat Commun*. 2021 May 14;12(1):2792.

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

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