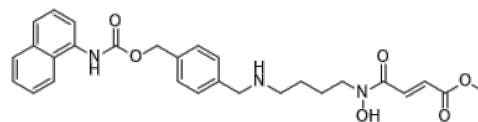


Product Name : Methylstat
Cat. No. : PC-25582
CAS No. : 1310877-95-2
Molecular Formula : C₂₈H₃₁N₃O₆
Molecular Weight : 505.57
Target : Histone Demethylase
Solubility : 10 mM in DMSO



CAS: 1310877-95-2

Biological Activity

Methylstat is a selective inhibitor of Jumonji C domain-containing histone demethylases (JHDMs) in cells, preferentially inhibits JMJD2A (H3K9me3 and H3K36me3 demethylase), JMJD2E (H3K9me3 demethylase) and JMJD3 (H3K27me3 demethylase).

Methylstat does not inhibit class I or class II HDACs, FAD-dependent demethylase LSD1, and weak activity against α -ketoglutarate-dependent hydroxylases such as prolyl hydroxylases PHD1-3.

Methylstat inhibited KYSE150 cell growth with IC₅₀ of 5.1 μ M.

Methylstat increased cellular levels of both H3K4me3 and H3K9me3 in KYSE150 cells with EC₅₀ of 10.3 μ M and 8.6 μ M, respectively.

Methylstat (1-4 μ M) prevents myogenesis through inhibition of H3K27me3-demethylase UTX in C2C12 cells.

References

Luo X, et al. J Am Chem Soc. 2011 Jun 22;133(24):9451-6.

Yao H, et al. Pharmaceuticals (Basel). 2025 Sep 8;18(9):1344.

Schwarz FM, et al. Cancer Gene Ther. 2025 Mar;32(3):286-296.

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

E-mail: tech@probechem.com