

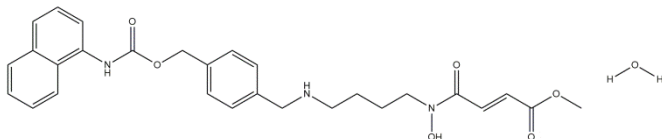
Methylstat (hydrate)

07/19

ALTERNATE NAMES: 4-[hydroxy[4-[[[4-[[[(1-naphthalenylamino)carbonyl]oxy)methyl]phenyl]methyl]amino]butyl]amino]-4-oxo-2E-butenoic acid, methyl ester, monohydrate; (E)-methyl 4-(hydroxy(4-((4-((naphthalen-1-ylcarbamoyl)oxy)methyl)benzyl)amino)butyl)amino)-4-oxobut-2-enoate hydrate; Histone Lysine Demethylase Inhibitor VII; JHDM Inhibitor IV

CATALOG #: B2836-1 1 mg
B2836-5 5 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₈H₃₁N₃O₆.H₂O

MOLECULAR WEIGHT: 523.58

CAS NUMBER: n/a

APPEARANCE: Crystalline solid

PURITY: ≥98%

SOLUBILITY: ~25 mg/ml in DMSO and DMF

DESCRIPTION: Methylstat is a methyl ester prodrug that inhibits Jumonji C domain-containing histone demethylase (JMJD) in cells. Methylstat inhibits growth of JMJD2C-sensitive oesophageal carcinoma cell line KYSE150 cells with an IC₅₀ of approximately 5.1 μM, whereas the free acid of methylstat does not inhibit cell growth up to 100 μM. Methylstat induces hypermethylation, inhibits JMJD2C and recovers H3K9me3 levels in HeLa cells.

STORAGE TEMPERATURE: -20°C. Store in the dark. Product is light sensitive.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCE: Luo, X., Liu, Y., Kubicek, S., et al. A selective inhibitor and probe of the cellular functions of Jumonji C domain-containing histone demethylases. *Journal of the American Chemical Society* 133(24), 9451-9456 (2011)

RELATED PRODUCTS:

ML-324 (Cat. No. 2763)
 GSK-J1 sodium salt (Cat. No. 2260)
 DiscoveryPak™ Epigenetic Modulators Set I (Cat. No. K879)
 IOX1 (Cat. No. 2266)
 2,4-Pyridinedicarboxylic Acid (Cat. No. B2809)

DISCLAIMER: *FOR RESEARCH USE ONLY! Not to be used on humans.*