

UNC1999

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For Research Use Only. Not for Use in Diagnostic Procedures.

Background UNC1999 inhibits EZH2 and EZH1 histone-lysine N-methyltransferase activity through competitive

inhibition of the cofactor S-Adenosyl-I-methionine (SAM). The UNC1999 inhibitor displays potent specificity relative to other histone methyltransferases. IC $_{50}$ values for EZH2 and EZH1 are 2 nM and 45 nM, respectively (1). Research studies demonstrate that UNC1999 effectively blocks histone H3 lysine 27 (H3K27) methylation. UNC1999 induces anti-proliferation, cell differentiation, and apoptosis, while

exhibiting low cellular toxicity (1,2).

Molecular Formula C₃₃H₄₃N₇O₂ **Molecular Weight** 569.8 g/mol

Purity >98%

CAS 1431612-23-5

Solubility Soluble in DMF at 1mg/ml and EtOH at 100ug/ml.

Storage Store lyophilized or in solution at -20°C, desiccated. In lyophilized form, the chemical is stable for 24

months. Once in solution, use within 3 months to prevent loss of potency. Aliquot to avoid multiple

freeze/thaw cycles.

Directions for Use UNC1999 is supplied as a lyophilized powder. For a 5 mM stock, reconstitute the 1 mg in 350.97 μl

DMSO. Working concentrations and length of treatment can vary depending on the desired effect, but

it is typically used at 5 nM -5 μ M for 2-48 hr.

Background References 1. Konze, K.D. et al. (2013) ACS Chem Biol 8, 1324-34.

2. Xu, B. et al. (2015) *Blood* 125, 346-57.

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