
PBIT

产品编号: D50836

CAS: 2514-30-9

分子式: C₁₄H₁₁NOS

纯度: ≥98%

InChi: InChi=1S/C₁₄H₁₁NOS/c1-9-5-7-10(8-6-9)11-3-2-4-12-13(11)14(16)15-17-12/h2-8H,1H3,(H,15,16)

InChi Key: INRCAEDSTPYET-UHFFFAOYSA-N

Smiles: CC1C=CC(=CC=1)C1=CC=CC2SNC(=O)C=21

外观: 固体粉末

作用通路: Histone Demethylase

溶解性: DMSO up to 50 mM

保存条件: Store in dry, dark place for one year.

产品介绍: PBIT is a potent, specific, reversible and cell-permeable inhibitor of Jumonji AT-Rich Interactive Domain 1 (JARID1) histone demethylases. It inhibits JARID1B (also known as KDM5B or PLU1) with an IC₅₀ of ~3 μM in vitro. It also inhibits the activity of other related histone demethylases JARID1A, JARID1C, and JMJD2E with IC₅₀ ~6, 4.9, and 28 μM respectively. PBIT does not affect the activity of unrelated UTX and JMJD3 H3K27me₃ demethylases. HeLa cells overexpressing full length JARID1B showed a significant increase in H3K4Me₃ level following PBIT treatment (~10 μM). It blocks the proliferation of UACC-812 tumor cells expressing higher levels of JARDID1B, but does not significantly affect MCF7 or MCF10A cells expressing lower levels of JARDID1B.