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## UNC0638

产品编号: D51020

CAS: 1255580-76-7

分子式: C<sub>30</sub>H<sub>47</sub>N<sub>5</sub>O<sub>2</sub>

纯度: ≥98%

InChi: InChi=1S/C<sub>30</sub>H<sub>47</sub>N<sub>5</sub>O<sub>2</sub>/c1-22(2)35-17-12-24(13-18-35)31-30-25-20-27(36-3)28(37-19-9-16-34-14-7-8-15-34)21-26(25)32-29(33-30)23-10-5-4-6-11-23/h20-24H,4-19H<sub>2</sub>,1-3H<sub>3</sub>, (H,31,32,33)

InChi Key: QOECJCVIMVJGX-UHFFFAOYSA-N

Smiles: CC(C)N1CCC(CC1)NC1=NC(=NC2=CC(OCCCN3CCCC3)=C(C=C21)OC)C1CCCCC1

外观: 固体粉末

作用通路: Autophagy

溶解性: DMSO up to 100mM

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

产品介绍: UNC0638 is a potent, selective and cell permeable G9a and GLP inhibitor, with a toxicity/function ratio of >100, compared to <6 for BIX01294. UNC0638 inhibits G9a HMTase with an IC<sub>50</sub> ~15 nM and GLP, a closely-related H3K9 HMTase, with an IC<sub>50</sub>~19 nM, but is more than 10, 000-fold selective over other epigenetic targets. G9a (EHMT2) and GLP (EHMT1) catalyze the mono and dimethylation of lysine 9 of histone 3 (H3K9) and other non-histone substrates such as p53 and WIZ. UNC0638 treatment in a variety of cell lines resulted in lower global H3K9me<sub>2</sub> levels, equivalent to levels observed in small hairpin RNA knockdown of G9a and GLP. UNC0638 inhibits H3K9 dimethylation in MDA-MB231 cells with an IC<sub>50</sub> of 81 nM. In mouse embryonic stem cells, UNC0638 reactivated G9a-silenced genes and a retroviral reporter gene in a concentration-dependent manner without promoting differentiation.