
HCI-2509 (SP2509)

产品编号: D50826

CAS: 1423715-09-6

分子式: C₁₉H₂₀ClN₃O₅S

纯度: ≥98%

InChi: InChi=1S/C₁₉H₂₀ClN₃O₅S/c1-13(17-12-15(20)5-6-18(17)24)21-22-19(25)14-3-2-4-16(11-14)29(26,27)23-7-9-28-10-8-23/h2-6,11-12,24H,7-10H2,1H3,(H,22,25)/b21-13+

InChi Key: NKUDGJUBIVEDTF-FYJGNVAPSA-N

Smiles: C/C(=N\NC(=O)C1=CC(=CC=C1)S(=O)(=O)N1CCOCC1)/C1C=C(Cl)C=CC=1O

外观: 固体粉末

作用通路: Apoptosis

溶解性: DMSO up to 50 mM

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

产品介绍: HCI-2509 (also named as SP2509 or LSD1-C12) is a highly potent, specific, and reversible Lysine Specific Demethylase-1 (LSD1) inhibitor. It inhibits LSD1 in biochemical assay with an IC₅₀ ~13 nM, and has no activity against monoamine oxidase proteins MAO-A and MAO-B (>300 μM). HCI-2509 is a non-competitive inhibitor to bind LSD1, changes its solution dynamics in a manner distinct from TCP. It has minimal inhibition of CYPs and hERG, shows cellular activity against several cancer cell lines including endometrial, breast, colorectal, pancreatic, and prostate cancer (IC₅₀ ~0.3-2.5 μM). HCI-2509 displayed sing-agent efficacy in multiple xenograft models and had good PK/PD relationship by using tumor histone H3K4 and H3K9 methylation. HCI-2509 serves as a very useful chemical probe to study the target biology of LSD1.