
RG108

产品编号: D50842

CAS: 48208-26-0

分子式: C₁₉H₁₄N₂O₄

纯度: ≥98%

InChi: InChI=1S/C₁₉H₁₄N₂O₄/c22-17-13-6-1-2-7-14(13)18(23)21(17)16(19(24)25)9-11-10-20-15-8-4-3-5-12(11)15/h1-8,10,16,20H,9H2,(H,24,25)/t16-/m0/s1

InChi Key: HPTXLHAHLXOAKV-INIZCTEOSA-N

Smiles: OC(=O)[C@H](CC1=CNC2=CC=CC=C21)N1C(=O)C2=CC=CC=C2C1=O

外观: 固体粉末

作用通路: DNA Methyltransferase

溶解性: DMSO up to 100 mM

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

产品介绍: RG108 is a potent, selective and cell permeable inhibitor of DNA methyltransferase. Unlike 5-azaC, RG108 is not a nucleoside and therefore does not modify DNA. It binds to the enzyme active site and inhibits DNMT enzymatic activity with an IC₅₀ ~ 115 nM. It inhibits DNA methylation in human cancer cell lines in vitro without detectable toxicity. Treatment with RG108 results in the demethylation of genomic DNA and can reactivate epigenetically silenced tumor suppressor genes. It has been shown to improve the reprogramming efficiency of mouse embryonic fibroblasts (MEFs) into induced pluripotent stem (iPS) cells. RG108 can potentially be used to maintain embryonic stem (ES) cells in an undifferentiated state as well as replace transcription factors in both mouse and human cell reprogramming.