
Remodelin

产品编号: D50853

CAS: 949912-58-7

分子式: C₁₅H₁₄N₄S

纯度: ≥98%

InChi: InChI=1S/C₁₅H₁₄N₄S/c16-9-11-5-7-12(8-6-11)14-10-20-15(17-14)19-18-13-3-1-2-4-13/h5-8,10
H,1-4H2,(H,17,19)

InChi Key: XAEJIFARBQJLML-UHFFFAOYSA-N

Smiles: N#CC1=CC=C(C=C1)C1=CSC(NN=C2CCCC2)=N1

外观: 固体粉末

作用通路: Histone Acetyltransferase

溶解性: DMSO up to 100 mM

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

产品介绍: Remodelin is a novel potent and selective inhibitor of the acetyl-transferase protein NAT10. It can improve nuclear architecture, chromatin organization, and fitness of both human lamin A/C-depleted cells and HGPS-derived patient cells, and decrease markers of DNA damage in these cells. Using a combination of chemical, cellular, and genetic approaches, acetyl-transferase protein NAT10 was identified as the target of Remodelin that mediated nuclear shape rescue in laminopathic cells via microtubule reorganization. Down-regulation and mutations of the nuclear-architecture proteins lamin A and C cause misshapen nuclei and altered chromatin organization associated with cancer and laminopathies, including the premature-aging disease Hutchinson-Gilford progeria syndrome (HGPS). Remodelin is a useful chemical tool to study how NAT10 affects nuclear architecture and suggest alternative strategies for treating laminopathies and aging.