
SW033291

产品编号: D50955

CAS: 459147-39-8

分子式: C₂₁H₂₀N₂O₃S₃

纯度: ≥98%

InChi: InChi=1S/C₂₁H₂₀N₂O₃S₃/c1-2-3-12-27(24)21-19(22)18-15(14-8-5-4-6-9-14)13-16(23-20(18)26-21)17-10-7-11-25-17/h4-11,13H,2-3,12,22H₂,1H₃

InChi Key: LCYAYKSMOVLVRL-UHFFFAOYSA-N

Smiles: CCCCC(=O)C1SC2=NC(=CC(=C2C=1N)C1C=CC=CC=1)C1=CC=CS1

外观: 固体粉末

作用通路: 15-PGDH

溶解性: DMSO up to 50 mM

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

产品介绍: SW033291 is a highly potent and selective inhibitor of 15-PGDH enzyme with IC₅₀ 1.5 nM, can increase prostaglandin PGE₂ levels in bone marrow and other tissues. It inhibits 15-PGDH with noncompetitive pattern. Treatment of A549 cells with SW033291 increased PGE₂ levels by 3.5-fold at 500 nM, with EC₅₀ value of ~75 nM. SW033291 accelerates hematopoietic recovery in mice receiving a bone marrow transplant. It also promotes tissue regeneration in mouse models of colon and liver injury. Tissues from 15-PGDH knockout mice demonstrate similar increased regenerative capacity. SW033291 is a good compound to validate 15-PGDH inhibition could be a new therapeutic strategy for tissue regeneration in diverse clinical contexts.