
WS3

产品编号: D50769

CAS: 1421227-52-2

分子式: C₂₈H₃₀F₃N₇O₃

纯度: ≥98%

InChi: InChi=1S/C₂₈H₃₀F₃N₇O₃/c1-37-10-12-38(13-11-37)16-19-4-5-21(14-23(19)28(29,30)31)35-27(40)34-20-6-8-22(9-7-20)41-25-15-24(32-17-33-25)36-26(39)18-2-3-18/h4-9,14-15,17-18H,2-3,10-13,16H2,1H3,(H2,34,35,40)(H,32,33,36,39)

InChi Key: KIKOYRNAERIVSJ-UHFFFAOYSA-N

Smiles: CN1CCN(CC2C=CC(=CC=2C(F)(F)F)NC(=O)NC2C=CC(=CC=2)OC2=CC(NC(=O)C3CC3)=NC=N2)C1

外观: 固体粉末

作用通路: Others

溶解性: DMSO up to 100 mM

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

产品介绍: WS3 is a highly potent and selective small molecule that promotes pancreatic β cell and RPE cells expansion, identified by a high-throughput, cell-based screening. It can induce proliferation of mouse R7T1 β cells with an EC₅₀ ~0.074 μ M, and expansion of primary rat and human β cells in dissociated and intact islet format with similar EC₅₀. WS3 can also reversibly proliferate primary RPE cells isolated from fetal and adult human donors. Following withdrawal of WS3, RPE cells differentiate into a functional monolayer, as exhibited by their expression of mature RPE genes and phagocytosis of photoreceptor outer segments. Furthermore, chemically expanded RPE cells preserve vision when transplanted into dystrophic Royal College of Surgeons (RCS) rats, a well-established model of retinal degeneration.