
WS6

产品编号: D50770

CAS: 1421227-53-3

分子式: C₂₉H₃₁F₃N₆O₃

纯度: ≥98%

InChi: InChI=1S/C₂₉H₃₁F₃N₆O₃/c1-37-10-12-38(13-11-37)17-21-6-7-22(15-24(21)29(30,31)32)35-26(39)14-19-2-8-23(9-3-19)41-27-16-25(33-18-34-27)36-28(40)20-4-5-20/h2-3,6-9,15-16,18,20H,4-5,10-14,17H₂,1H₃,(H,35,39)(H,33,34,36,40)

InChi Key: FTODTDQFHDJWIQ-UHFFFAOYSA-N

Smiles: CN1CCN(CC2C=CC(=CC=2C(F)(F)F)NC(=O)CC2C=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: WS6 is a highly potent and selective small molecule that promotes pancreatic β cell proliferation in rodent and human primary islets, identified by a high-throughput, cell-based screening using rodent pancreatic β cells. It can induce proliferation of mouse R7T1 cells with an EC₅₀ ~0.28 μ M, and induce up to 4% of rat β cells and 3% of human β cells to proliferate, with a similar EC₅₀ of 0.4 μ M. WS6 induces proliferation of primary rat and human β cells in intact islet format at 0.2-1.0 μ M concentration. In the RIP-DTA mouse model of β cell ablation, WS6 demonstrated excellent in vivo effect on normalizing blood glucose and inducing concomitant increases in β cell proliferation and β cell number. Affinity pulldown and kinase profiling studies implicate Erb3 binding protein-1 and the I κ B kinase pathway in the mechanism of action of WS6.