
Atglistatin

产品编号: D50817

CAS: 1469924-27-3

分子式: C₁₇H₂₁N₃O

纯度: ≥98%

InChi: InChi=1S/C₁₇H₂₁N₃O/c1-19(2)16-10-8-13(9-11-16)14-6-5-7-15(12-14)18-17(21)20(3)4/h5-12H,1-4H3,(H,18,21)

InChi Key: AWOPBSAJHCUSAS-UHFFFAOYSA-N

Smiles: CN(C)C1C=CC(=CC=1)C1=CC(=CC=C1)NC(=O)N(C)C

外观: 固体粉末

作用通路: ATGL

溶解性: DMSO up to 100 mM

保存条件: Powder: -20°C for 3 years ; In solvent: -80°C for 1 year.

产品介绍: Atglistatin is a highly potent, selective and competitive inhibitor of adipose triglyceride lipase (ATGL) with an IC₅₀ of ~0.7 μM for inhibition of lipolysis in vitro, but no toxicity up to a concentration of 50 μM. Atglistatin inactivated ATGL in the presence or absence of the ATGL co-activator CGI-58. It does not displace ATGL from lipid droplets of adipocytes. Immunoprecipitation experiments revealed that Atglistatin does not interfere with the interaction of ATGL and CGI-58. Atglistatin inhibited TG hydrolase activity of wild-type WAT in a dose-dependent manner up to 78% in animal models. It was highly effective in inhibiting lipolysis in WAT organ cultures of wild-type mice. Dose and time-dependent inhibition of lipolysis was also observed in fasted wild-type C57Bl/6J mice. Atglistatin can serve as a very useful tool compound to study the pathophysiology and druggability of ATGL in animal models of metabolic disease and cachexia.