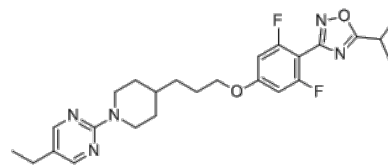


Product Name : DA-1241
Cat. No. : PC-72645
CAS No. : 1914136-10-9
Molecular Formula : C₂₅H₃₁F₂N₅O₂
Molecular Weight : 471.553
Target : GPR119
Solubility : 10 mM in DMSO



Biological Activity

DA-1241 (Vanoglipel, DA1241) is a novel potent, highly selective **GPR119 agonist**, activates human GPR119 (EC₅₀=4.37 nM) in increasing cAMP levels in GPR119-overexpressing HEK293 cells.

DA-1241 increased cAMP levels via activated mouse GPR119 (EC₅₀, 71.5 nM) and rat GPR119 (EC₅₀, 156 nM).

DA-1241 showed no significant activity against 156 off-target proteins at 10 μM, including human GLP-1 receptor and human GPR40.

DA-1241 stimulated insulin secretion in hamster insulinoma HIT-T15 cells with EC₅₀ of 22.3 nM, association with enhanced human insulin promoter activity.

DA-1241 significantly reduced postprandial glucose excursion, significantly preserved β-cell mass with reduced PDX1 levels in the islets from HFD/STZ diabetic mice.

DA-1241 reduced triglyceride content in the liver thereby improved fatty liver, reduced gluconeogenic enzyme expression in HepG2 cells and mouse liver, reduced autophagic flow in HepG2 cells.

References

Kim MK, et al. *Biomed Pharmacother.* 2021 Dec;144:112324.

Kim Y, et al. *Diabetes Metab J.* 2022 Jan 21.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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