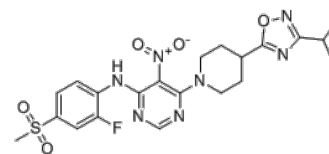


Product Name : AR231453
Cat. No. : PC-20426
CAS No. : 733750-99-7
Molecular Formula : C₂₁H₂₄FN₇O₅S
Molecular Weight : 505.53
Target : GPR119
Solubility : 10 mM in DMSO



Biological Activity

AR231453 (AR 231453) is the first potent, selective and orally efficacious GPR119 agonist with EC₅₀ of 0.68 nM.

AR231453 displays no off-target activity across a 76 receptor and enzyme profiling panel (CEREP).

AR231453 has activity across species, albeit with somewhat lower potency in rodents (EC₅₀ monkey GPR119=0.4 nM; mouse GPR119 =12 nM; rat GPR119=14 nM; dog GPR119=1.6 nM).

AR231453 stimulates cAMP production via endogenously expressed GPR119 in the β-cell like hamster insulinoma line HIT-T15 with IC₅₀ of 4.7 nM.

AR231453 (20 mg/kg, po) enhanced glucose-dependent insulin release and improved oral glucose tolerance in wild-type C57/bl6J mice but not in GPR119-deficient mice.

References

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Chu ZL, et al. Endocrinology. 2008 May;149(5):2038-47.

Chu ZL, et al. Mol Endocrinol. 2010 Jan;24(1):161-70.

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

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