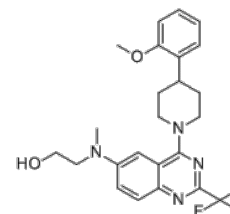


Product Name : SBI-553
Cat. No. : PC-38142
CAS No. : 1849603-72-0
Molecular Formula : C₂₆H₃₁N₄O₂
Molecular Weight : 450.558
Target : Neurotensin Receptor
Solubility : 10 mM in DMSO



Biological Activity

SBI-553 (SBI553) is a potent, selective, β -arrestin-biased, brain penetrant **neurotensin receptor 1** (NTR1, NTSR1) allosteric modulator with EC₅₀ of 0.34 μ M.

SBI-553 had no effect on the potency of NT in the NTR1 high-content (β -arrestin2-GFP) assay.

SBI-553 not only acts as a β -arrestin-biased agonist but also extends profound β -arrestin bias to the endogenous ligand by selectively antagonizing G protein signaling.

SBI-553 only showed moderate affinity against a range of related and unrelated GPCRs using the same high-content assay format (NTR2, GPR35, GPR55, K-opioid).

SBI-553 (12 mg/kg, i.p.) attenuated basal hyperlocomotion in dopamine transporter knockout (DAT^{-/-}) mice.

SBI-553 showed efficacy in animal models of psychostimulant abuse, including cocaine self-administration, without the side effects characteristic of balanced NTSR1 agonism.

References

Pinkerton AB, et al. *J Med Chem.* 2019 Sep 12;62(17):8357-8363.

Slosky LM, et al. *Cell.* 2020 Jun 11;181(6):1364-1379.e14.

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

E-mail: tech@probechem.com