

## Catalog # 10-4449 SBI-553

CAS# 1849603-72-0

2-[[2-(1-Fluorocyclopropyl)-4-[4-(2-methoxyphenyl)piperidin-1-yl)quinazolin-6-yl]methylamino]ethanol Lot # FBS3076

SBI-553 is a potent, brain penetrant, and orally bioavailable allosteric modulator of neurotensin receptor 1 (NTSR1; EC<sub>50</sub> = 340 nM)). It acts as a ß-Arrestin-biased agonist and selectively antagonizes G protein signaling conferring profound ß-Arrestin bias towards the endogenous ligand. SBI-553 displayed efficacy in mouse models of psychostimulant abuse without the characteristic undesirable side effects of unbiased NTSR1 agonism. This functionally selective modulation of NTSR1 may be a new therapeutic approach to treating psychostimulant abuse and other chemical and behavioral addictions.

- 1) Pinkerton et al. (2019), Discovery of ß-Arrestin Biased, Orally Bioavailable and CNS Penetrant Neurotensin Receptor 1 (NTR1) Allosteric Modulators; J. Med. Chem. **62** 8357
- Slosky et al. (2020), 
  ß-Arrestin-Biased Allosteric Modulator of NTSR1 Selectively Attenuates Addictive Behaviors; Cell 181
  1364
- 3) Duan et al. (2023), GPCR activation and GRK2 assembly by a biased intracellular agonist; Nature 620 676

## **PHYSICAL DATA**

Molecular Weight: 450.56

Molecular Formula: C<sub>26</sub>H<sub>31</sub>FN<sub>4</sub>O<sub>2</sub> Purity: >98% by HPLC

NMR: (Conforms)

Solubility: DMSO (12 mg/ml)
Physical Description: Pale yellow solid

Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

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