PPAR-γ Modulator SR1664

Chemical Name:  (S)-4’-(2,3-dimethyl-5-((1-(4-nitrophenyl)ethyl)carbamoyl)-1H-indol-1-yl)methyl)-[1,1’-biphenyl]-2-carboxylic acid

- **Molecular Weight:** 547.60
- **Formula:** C_{33}H_{29}N_{3}O_{5}
- **Purity:** ≥98%
- **CAS#:** 1338259-05-4
- **Solubility:** DMSO up to 25 mM
- **Storage**
  - **Powder:** 4°C 1 year
  - **DMSO:** 4°C  3 month
  - **-20°C:** 1 year

Biological Activity:

SR1664 is a unique PPARγ modulator that has potent anti-diabetic activity. SR1664 has a unique tight binding mode to PPARγ (EC\textsubscript{50} ~80 nM), completely lacking classical transcriptional agonism and blocking the Cdk5-mediated phosphorylation of PPARγ (EC\textsubscript{50} ~200 nM) in cultured adipocytes and in insulin-resistant mice. It has potent antidiabetic activity while not causing the fluid retention and weight gain that are serious side effects of many PPARγ drugs. Unlike TZDs, SR1664 also does not interfere with bone formation in culture. It could be developed as new classes of antidiabetes drug specifically targeting the Cdk5-mediated phosphorylation of PPARγ.

How to Use:

**In vitro:** SR1664 was used at 2-10 µM final concentration in the in vitro assays.

**In vivo:** SR1664 was injected intraperitoneally at 40 mg/kg twice per day for 5 days and showed good efficacy in high-fat diet (HFD) and db/db mouse models.

Reference:


Products are for research use only. Not for human use.