Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

SR3335

Catalog No: tcsc1044

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
293753-05-6

Formula:
$C_{13}H_9F_6NO_3S_2$

Pathway:
Metabolic Enzyme/Protease

Target:
ROR

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
ML 176

Observed Molecular Weight:
405.34

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Product Description

SR3335 is a selective **RORα** synthetic ligand, directly binds to RORα (**K_i** 220 nM) but not other RORs, and functions as a selective partial inverse agonist of RORα in cell-based assays.

IC50 & Target: Ki: 220 nM (RORα)[1]

In Vitro: SR3335 is a selective RORα partial inverse agonist. In a biochemical radioligand binding assay using [^{3}H]25-hydroxycholesterol as a label it is clear that unlabeled SR3335 dose-dependently competes for binding to the RORα LBD. The K_i is calculated as 220 nM using the Cheng-Prusoff equation. In a cell-based chimeric receptor Gal4 DNA-binding domain-NR ligand binding domain cotransfection assay, SR3335 significantly inhibits the constitutive transactivation activity of RORα (IC_{50}=480 nM)(partial inverse agonist activity), but has no effect on the activity of LXRα and RORγ[1].

In Vivo: Pharmacokinetic studies indicate that SR3335 displays reasonable exposure following an i.p. injection into mice. The ability of SR3335 is assessed to suppress gluconeogenesis using a diet induced obesity (DIO) mouse model where the mice where treated with 15 mg/kg b.i.d., i.p. for 6-days followed by a pyruvate tolerance test. SR3335 treated mice displays lower plasma glucose levels following the pyruvate challenge consistent with suppression of gluconeogenesis. Importantly, mice treated with SR3335 displayed no difference in body weight or food intake after 7-days of treatment with SR3335[1].