Web: www.taiclone.com
Tel: +886-2-2735-9682
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SRT 1720 (Hydrochloride)

Catalog No: tcsc0509

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1001645-58-4

Formula:
$C_{25}H_{23}N_7OS.xHCl$

Pathway:
Autophagy;Epigenetics;Cell Cycle/DNA Damage

Target:
Autophagy;Sirtuin;Sirtuin

Purity / Grade:
>98%

Solubility:
H2O : 15.7 mg/mL (Need ultrasonic and warming); DMSO : 62.5 mg/mL (Need ultrasonic)

Observed Molecular Weight:
1000

Product Description

SRT 1720 Hydrochloride is a selective activator of **SIRT1** with an $\mathbf{EC_{1.5}}$ of 0.16 μM, and shows less potent activities on SIRT2 and

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SIRT3 with $EC_{1.5}$s of 37 μM and 300 μM, respectively.

IC50 & Target: EC1.5: 0.16 μM (SIRT1), 37 μM (SIRT2), > 300 μM (SIRT3)[1]

In Vitro: SRT1720 effectively decreases the acetylation of p53 in cells even in the absence of SIRT1, and this is attributed to inhibition of histone acetyltransferase p300[2].

In Vivo: SRT1720 (10, 30, 100 mg/kg, p.o.) significantly reduces the hyperinsulinaemia after 4 weeks, partially normalizing elevated insulin levels similar to rosiglitazone treatment. SRT1720 treatment significantly reduces fasting blood glucose to near normal levels in *Lep*$^{ob/ob}$ mice[1]. SRT1720 has ability to protect against the negative effects of diet-induced obesity in mice, and has a connection to metabolic adaptation in fatty acid and oxidative metabolism through downstream targets of SIRT1 such as PGC1α and FOXO1[2]. SRT1720 (50-100 mg/kg, p.o.), during emphysema development attenuates elastase-induced airspace enlargement and lung function impairment as well as reduces arterial oxygen saturation in WT mice[3].