

SRT 1720 (Hydrochloride)

Catalog No: tcsc0509



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

1001645-58-4

Formula:

$C_{25}H_{23}N_7OS \cdot xHCl$

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

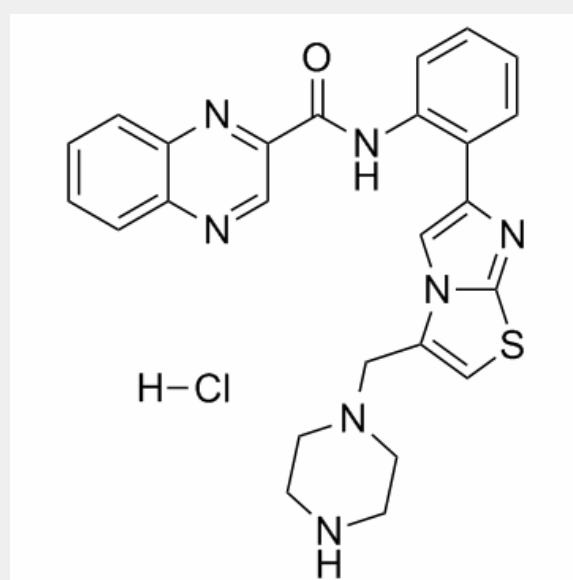
SRT 1720 Hydrochloride is a selective activator of **SIRT1** with an **EC_{1.5}** of 0.16 μ M, and shows less potent activities on SIRT2 and

SIRT3 with EC_{1.5}s of 37 μ M and 300 μ M, respectively.

IC₅₀ & Target: EC_{1.5}: 0.16 μ M (SIRT1), 37 μ M (SIRT2), > 300 μ M (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 PGC1 α 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].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!