

# 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

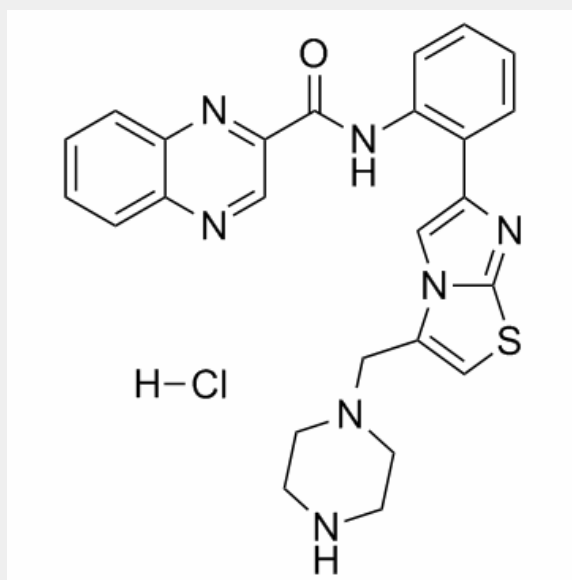
SRT 1720 Hydrochloride is a selective activator of **SIRT1** with an **EC<sub>1.5</sub>** of 0.16  $\mu$ M, and shows less potent activities on SIRT2 and

SIRT3 with EC<sub>1.5</sub>s of 37  $\mu$ M and 300  $\mu$ M, respectively.

IC50 & Target: EC1.5: 0.16  $\mu$ M (SIRT1), 37  $\mu$ M (SIRT2), > 300  $\mu$ M (SIRT3)<sup>[1]</sup>

***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<sup>[2]</sup>.

***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<sup>ob/ob</sup>* mice<sup>[1]</sup>. 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 $\alpha$  and FOXO1<sup>[2]</sup>. 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<sup>[3]</sup>.



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