



## **SRT 1720**

**Catalog No: tcsc0437** 

Available	Sizes		
Size: 5mg			
Size: 10mg			
Size: 50mg			
Size: 100mg			
Specifica	tions		
<b>CAS No:</b> 925434-55-5			
Formula: C <sub>25</sub> H <sub>23</sub> N <sub>7</sub> OS			
Pathway: Epigenetics;Cell Cy	/cle/DNA Damage		
<b>Target:</b> Sirtuin;Sirtuin			
Purity / Grade: >98%			
<b>Solubility:</b> 10 mM in DMSO			
<b>Observed Molect</b> 469.56	ılar Weight:		

## **Product Description**

SRT 1720 is a selective activator of human **SIRT1** with an  $\mathbf{EC_{1.5}}$  of 0.16  $\mu$ M, and shows less potent activities against 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: SRT 1720 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: SRT 1720 (10, 30, 100 mg/kg, p.o.) significantly reduces the hyperinsulinaemia after 4 weeks, partially normalizing elevated insulin levels similar to rosiglitazone treatment. SRT 1720 treatment significantly reduces fasting blood glucose to near normal levels in  $Lep^{ob/ob}$  mice<sup>[1]</sup>. SRT 1720 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>. SRT 1720 (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!