

# AK-7

**Catalog No: tcsc3223**



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

420831-40-9

**Formula:**

$C_{19}H_{21}BrN_2O_3S$

**Pathway:**

Epigenetics;Cell Cycle/DNA Damage

**Target:**

Sirtuin;Sirtuin

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 50$  mg/mL (114.32 mM)

**Observed Molecular Weight:**

437.35

## Product Description

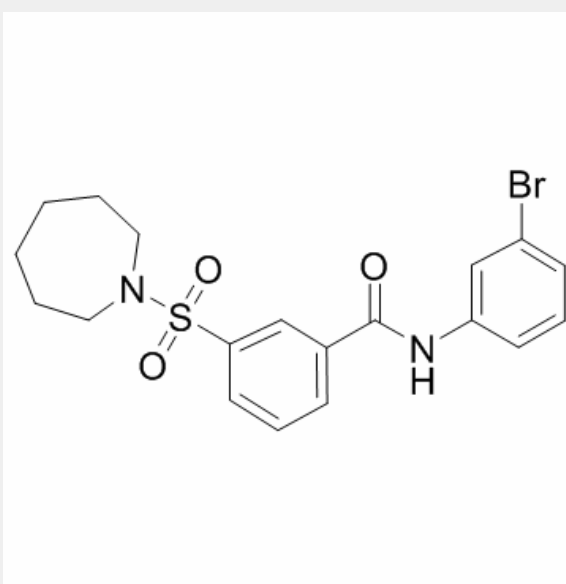
AK-7 is a selective cell- and brain-permeable **SIRT2** inhibitor, with an **IC<sub>50</sub>** of 15.5  $\mu$ M.

IC50 & Target: IC50: 15.5  $\mu$ M (SIRT2)<sup>[1]</sup>

***In Vitro:***

AK-7 (10  $\mu$ M) reduces cholesterol levels in naive N2a neuroblastoma cells and hippocampal slice cultures from wild-type mice. AK-7 (1  $\mu$ M) shows neuroprotective effect of AK-7 in striatal Huntington's disease (HD) neurons<sup>[1]</sup>. AK-7 (12.5  $\mu$ M) decreases ratio of DA neurons in primary midbrain cultures<sup>[3]</sup>.

**In Vivo:** AK-7 (15 mg/kg/dose, i.p.) is brain-permeable in wild-type and HD mice<sup>[1]</sup>. AK-7 (10, 20 mg/kg, i.p.) improves the behavior and neuropathological phenotype and extends survival of R6/2 HD mice. AK-7 (20 mg/kg) ameliorates HD neuropathology in R6/2 mice. AK-7 also reduces the polyglutamine aggregation in R6/2 brain. In addition, AK-7 treated 140CAG mice show motor performance changes that parallel untreated wild-type mice, with the 20 mg/kg dose being most effective and significantly different from untreated 140CAG mice<sup>[2]</sup>.



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