Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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 : ≥ 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_{50}** of 15.5 μM.

IC50 & Target: IC50: 15.5 μM (SIRT2)[1]

In Vitro:

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

In Vivo: AK-7 (15 mg/kg/dose, i.p.) is brain-permeable in wild-type and HD mice[1]. 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[2].