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

TDZD-8

Catalog No: tcsc1671

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
327036-89-5

Formula:
$C_{10}H_{10}N_2O_2S$

Pathway:
Stem Cell/Wnt;PI3K/Akt/mTOR

Target:
GSK-3;GSK-3

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 100 mg/mL (449.92 mM)

Alternative Names:
GSK-3β Inhibitor I;NP 01139

Observed Molecular Weight:
222.26

Product Description

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

TDZD-8 is an inhibitor of **GSK-3β**, with an **IC_{50}** of 2 μM; TDZD-8 shows less potent activities against Cdk-1/cyclin B, CK-II, PKA, and PKC, with all IC_{50}s of >100 μM.

IC50 & Target: IC50: 2 μM (GSK-3β)[1]

In Vitro: TDZD8 results in a significant decline of cellular ATP levels in PC-3 cells. TDZD8 (10 μM) treatment also triggers a drastic autophagy response and AMPK activation in PC-3 cells. Furthermore, TDZD8 (10 μM) reduces mTOR phosphorylation levels at the S2448 site. In addition, TDZD8 (10 μM) induces LKB1 nuclear-cytoplasm translocation[3].

In Vivo: TDZD-8 (TDZD8, 1 or 2 mg/kg, i.p.) both reduces the induction of p-DARPP32 following chronic L-dopa treatment in parkinsonian animals. TDZD8 treatment of 21 days induces a significant reduction in PKA expression in rats with established dyskinesia. Moreover, TDZD8 reduces FosB mRNA level in the striatum and lowers the expression of PPEB mRNA to similar levels as in 6-OHDA-lesioned rats without treated with L-dopa. The decrease in dyskinesia induced by TDZD8 is overcome by dopamine rceptor-1 agonist[2].