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

TWS119

Catalog No: tcsc0224

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
601514-19-6

Formula:
$C_{18}H_{14}N_4O_2$

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

Target:
GSK-3;GSK-3;Autophagy

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 50 mg/mL (157.07 mM)

Observed Molecular Weight:
318.33

Product Description

TWS119 is a specific inhibitor of **GSK-3β**, with an **IC_{50}** of 30 nM, and activates the wnt/β-catenin pathway.

IC50 & Target: IC50: 30 nM (GSK-3β)[1]

In Vitro:

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

TWS119 induces neuronal differentiation in P19 EC cells and primary mouse ESCs. TWS119 binds to GSK-3β with K_D of 126 nM, and modulates the activity of the complex, triggering downstream transcriptional events that lead the neuronal induction[1]. TWS119 (+γδT or $CCR5^+$γδT cell phenotypes. TWS119 (0.5, 1.0 and 2 μM) increases the expression level of granzyme B in a dose-dependent manner. TWS119 also enhances the cytolytic activity of γδT cells against tumour cells in vitro[3].

In Vivo: TWS119 (30 mg/kg, i.p.) improves the neurologic function and decreases neurologic deficit dcore in rtPA-treated MCAO rats. TWS119 effectively relieves cerebral edema, and reduces cerebral infarction in rats treated with rtPA. TWS119 also effectively decreases blood-brain barrier permeability in rtPA-Treated MCAO Rats and attenuates rtPA-induced hemorrhage in ischemic brain tissue. Futhermore, TWS119 activates the Wnt/β-Catenin signaling pathway and increases the expression of Claudin-3 and ZO-1[2].