

# 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 :  $\geq 50$  mg/mL (157.07 mM)

**Observed Molecular Weight:**

318.33

## Product Description

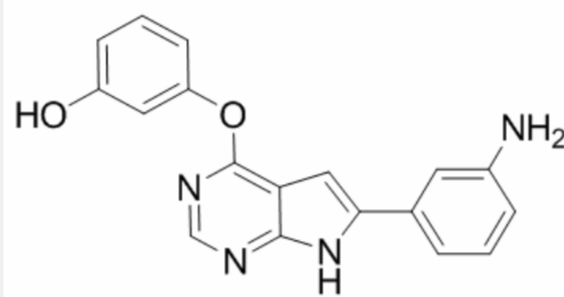
TWS119 is a specific inhibitor of **GSK-3 $\beta$** , with an **IC<sub>50</sub>** of 30 nM, and activates the wnt/ $\beta$ -catenin pathway.

IC50 & Target: IC50: 30 nM (GSK-3 $\beta$ )<sup>[1]</sup>

***In Vitro:***

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

**In Vivo:** TWS119 (30 mg/kg, i.p.) improves the neurologic function and decreases neurologic deficit score 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. Furthermore, TWS119 activates the Wnt/ $\beta$ -Catenin signaling pathway and increases the expression of Claudin-3 and ZO-1<sup>[2]</sup>.



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