



**PJ34** 

**Catalog No: tcsc1463** 



## **Available Sizes**

Size: 10mg

Size: 50mg

Size: 100mg



## **Specifications**

CAS No:

344458-19-1

Formula:

 $C_{17}^{H}_{17}^{N}_{3}^{O}_{2}^{O}$ 

**Pathway:** 

Epigenetics; Cell Cycle/DNA Damage

**Target:** 

PARP;PARP

**Purity / Grade:** 

>98%

**Solubility:** 

DMSO: 30 mg/mL (101.58 mM; Need ultrasonic and warming)

**Observed Molecular Weight:** 

295.34

## **Product Description**

PJ34 is a potent specific inhibitor of **PARPI/2** with  $IC_{50}$  of 110 nM and 86 nM, respectively.

IC50 & Target: IC50: 110 nM (PARP1), 86 nM (PARP2)<sup>[1]</sup>

In Vitro:





PJ34 inhibits the PARP enzyme activity with an IC $_{50}$  of 110±1.9 nM. To compare the neuroprotective properties of other PARP inhibitors in PC12 cells, PJ34 is evaluated using by LDH assay. PJ34 treatment also significantly and concentration dependently attenuates cell death at a concentration ranging from  $10^{-7}$  to  $10^{-5}$  M $^{[1]}$ .

In Vivo: To compare the potency and efficacy with other PARP inhibitors, PJ34 is evaluated at the doses of 3.2 and 10 mg/kg, respectively. PJ34 at the dose of 3.2 mg/kg significantly reduces cortical damage by 33%; however, 10 mg/kg dosing shows reversed effect (17% reduction)<sup>[1]</sup>. PJ34 (25 mg/kg) reduces the levels of TNF- $\alpha$  mRNA in ischemic animals by 70% and these values in treated mice do not differ from that of sham or naive animals. Treatment of ischemic mice with PJ34 reduces the level of E-selectin mRNA by 81% and that of ICAM-1 mRNA by 54%, compared to vehicle-treated ischemic mice<sup>[2]</sup>.

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