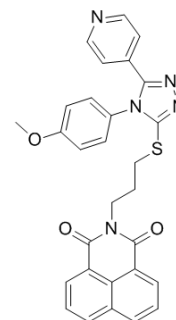


## WIKI4

<b>Cat. No.:</b>	HY-16910		
<b>CAS No.:</b>	838818-26-1		
<b>Molecular Formula:</b>	C <sub>29</sub> H <sub>23</sub> N <sub>5</sub> O <sub>3</sub> S		
<b>Molecular Weight:</b>	521.59		
<b>Target:</b>	PARP; $\beta$ -catenin		
<b>Pathway:</b>	Cell Cycle/DNA Damage; Epigenetics; Stem Cell/Wnt		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



## SOLVENT & SOLUBILITY

### In Vitro

DMSO : 6.8 mg/mL (13.04 mM; Need ultrasonic and warming)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.9172 mL	9.5861 mL	19.1721 mL
	5 mM	0.3834 mL	1.9172 mL	3.8344 mL
	10 mM	0.1917 mL	0.9586 mL	1.9172 mL

Please refer to the solubility information to select the appropriate solvent.

## BIOLOGICAL ACTIVITY

### Description

WIKI4 is a potent tankyrase inhibitor with an IC<sub>50</sub> of 26 nM for TNKS2. WIKI4 potently inhibits Wnt/ $\beta$ -catenin signaling and that its half-maximal response dose is 75 nM. WIKI4 mediates its effects on Wnt/ $\beta$ -catenin signaling by inhibiting the enzymatic activity of TNKS2<sup>[1][2]</sup>. WIKI4 is cytotoxic to SCLC cells with an IC<sub>50</sub> value of 0.02  $\mu$ M<sup>[3]</sup>.

### IC<sub>50</sub> & Target

TNKS2  
26 nM (IC<sub>50</sub>)

### In Vitro

WIKI4 (100 nM, 1  $\mu$ M; 6 days; DLD1 cells) inhibits growth of DLD1 cells relative to DMSO controls in media containing low serum. WIKI4 inhibits expression of  $\beta$ -catenin target genes and cellular responses to Wnt/ $\beta$ -catenin signaling<sup>[1]</sup>. WIKI4 (1  $\mu$ M; 2 hours, 4 hours, 6 hours, or 24 hours; DLD1 cells) significantly increases the steady-state abundance of AXIN1 and AXIN2<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay<sup>[1]</sup>

Cell Line:	DLD1 cells
Concentration:	100 nM, 1 $\mu$ M
Incubation Time:	6 days
Result:	Inhibited growth of DLD1 cells.

#### Western Blot Analysis<sup>[1]</sup>

Cell Line:	DLD1 cells
Concentration:	1 $\mu$ M
Incubation Time:	2 hours, 4 hours, 6 hours, or 24 hours
Result:	Significantly increased the steady-state abundance of AXIN1 and AXIN2.

## CUSTOMER VALIDATION

- Dig Dis Sci. 2018 Sep;63(9):2341-2350.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. James RG, et al. WIKI4, a novel inhibitor of tankyrase and Wnt/ $\beta$ -catenin signaling. PLoS One. 2012;7(12):e50457.
- [2]. Haikarainen T, et al. Structural basis and selectivity of tankyrase inhibition by a Wnt signaling inhibitor WIKI4. PLoS One. 2013 Jun 6;8(6):e65404.
- [3]. Sadava D, et al. The effect of brassinolide, a plant steroid hormone, on drug resistant small-cell lung carcinoma cells. Biochem Biophys Res Commun. 2017 Nov 4;493(1):783-787.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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