Proteins

## **Product** Data Sheet

# TNIK-IN-5

Cat. No.: HY-143437 CAS No.: 2754265-66-0 Molecular Formula:  $C_{22}H_{17}N_3O_3$ Molecular Weight: 371.39 Target: Wnt

Pathway: Stem Cell/Wnt

Storage: Powder -20°C 3 years

> In solvent -80°C 6 months

> > -20°C 1 month

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 10 mg/mL (26.93 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.6926 mL	13.4629 mL	26.9259 mL
	5 mM	0.5385 mL	2.6926 mL	5.3852 mL
	10 mM	0.2693 mL	1.3463 mL	2.6926 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1 mg/mL (2.69 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description	TNIK-IN-5 is an efficient TNIK inhibitor with IC <sub>50</sub> of 0.05 $\mu$ M. TNIK-IN-5 efficiently inhibits Wnt signaling in intact cells. TNIK-IN-5 shows excellent in vitro anti-colorectal cancer activity <sup>[1]</sup> .
IC <sub>50</sub> & Target	IC <sub>50</sub> : 0.05 μM (TNIK) <sup>[1]</sup>
In Vitro	TNIK-IN-5 (compound 8g) (1.25-5 $\mu$ M; 48 hours) significantly inhibits the cell proliferation of HCT116 in a dose-dependent manner <sup>[1]</sup> .  TNIK-IN-5 (1 $\mu$ M; 24, 48 hours) strongly prevents HCT116 cells migration <sup>[1]</sup> .  TNIK-IN-5 (10-40 $\mu$ M; 48 hours) concentration-dependently inhibits the protein levels of $\beta$ -catenin and TCF-4 in the nucleus, and significantly decreases the expression of Wnt target gene products, including Axin2 and c-Myc <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.  Cell Proliferation Assay

Cell Line:	HCT116 cells <sup>[1]</sup>	
Concentration:	1.25 μΜ, 2.5 μΜ, 5 μΜ	
Incubation Time:	48 hours	
Result:	Significantly inhibited the cell proliferation in a dose-dependent manner.	

#### **REFERENCES**

[1]. Luo X, Yang R, Li Y, Zhang L, Yang S, Li L. Discovery of benzo[d]oxazol-2(3H)-one derivatives as a new class of TNIK inhibitors for the treatment of colorectal cancer. Bioorg Med Chem Lett. 2022;67:128745.

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

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