Product Data Sheet

WEE1-IN-3

Cat. No.:	HY-138239
CAS No.:	2272976-28-8
Molecular Formula:	$C_{28}H_{31}N_7O_2$
Molecular Weight:	497.59
Target:	Wee1
Pathway:	Cell Cycle/DNA Damage

Storage:			
	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month
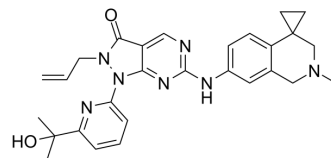
SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (502.42 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.0097 mL	10.0484 mL	20.0969 mL
	5 mM	0.4019 mL	2.0097 mL	4.0194 mL
	10 mM	0.2010 mL	1.0048 mL	2.0097 mL

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

In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
	Solubility: ≥ 2.08 mg/mL (4.18 mM); Clear solution
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil
	Solubility: ≥ 2.08 mg/mL (4.18 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	WEE1-IN-3 is a potent Wee1 kinase inhibitor with an IC$_{50}$ of <10 nM. WEE1-IN-3 has anticancer activities[1].
IC$_{50}$ & Target	IC50: <10 nM (Wee1 kinase)[1]
In Vitro	WEE1-IN-3 (example 1) inhibits cancer cell growth with IC$_{50}$ values of 100-1000 nM and <100 nM for SW480 cells and H23 cells, respectively[1].WEE1 kinase plays a role in the G2-M cell-cycle checkpoint arrest for 'ONA repair before mitotic entry. Normal cells repair damaged DNA during GI arrest. Cancer cells often have a deficient G i-S checkpoint and depend on a functional G2-M checkpoint for DNA repair. WEE1 is overexpressed in various cancer types[1].
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Peter Qinhua HUANG, et al. 1, 2 - dihydro- 3h- pyrazolo [3, 4 - d] pyrimidin -3 - one analogs. WO2019028008A1.

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

Tel: 609-228-6898   Fax: 609-228-5909   E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA