Miclxin

Cat. No.: HY-138301

CAS No.: 2494198-61-5

Molecular Formula: $C_{26}H_{27}N_5O_2$

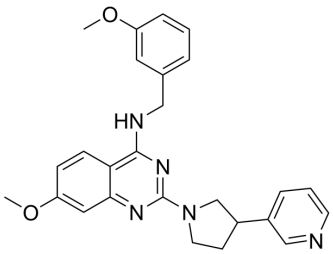
Molecular Weight: 441.52

Target: β-catenin

Pathway: Stem Cell/Wnt

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 : 10 mg/mL (22.65 mM; ultrasonic and warming and heat to 80°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2649 mL	11.3245 mL	22.6490 mL
	5 mM	0.4530 mL	2.2649 mL	4.5298 mL
	10 mM	0.2265 mL	1.1325 mL	2.2649 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: ≥ 1 mg/mL (2.26 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 1 mg/mL (2.26 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Miclxin (DS37262926) is a potent inhibitor of mutant β-catenin, involving in Wnt signaling pathway. Miclxin induces β-catenin-dependent apoptosis, leads to severe mitochondrial damage with the loss of mitochondrial membrane. Miclxin kills tumor via targeting to MIC60, a major components of the mitochondrial contact site and cristae organizing system (MICOS) complex[1].

In Vitro

Miclxin (0-15 μM; 48 h) inhibits the growth of β-catenin-mutated HCT116 cells and isogenic HCT116 (CTNNB1 Δ45/-) cells, and induces (10 μM; 24 h) apoptosis in HCT116 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	HCT116 (CTNNB1 +/–) and (CTNNB1 △45/–)
Concentration:	0, 5, 8, 10, 12, and 15 μM
Incubation Time:	48 hours
Result:	Inhibited cell growth with inhibition rate of 100% at 15 μM.

REFERENCES

[1]. Ikeda H, et al. Miclxin, a Novel MIC60 Inhibitor, Induces Apoptosis via Mitochondrial Stress in β-Catenin Mutant Tumor Cells. ACS Chem Biol. 2020 Aug 21;15(8):2195-2204.

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