NiCur

Cat. No.: HY-139149

CAS No.: 2674753-39-8

Molecular Formula: $C_{22}H_{16}N_2O$

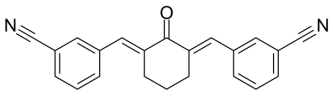
Molecular Weight: 324.38

Target: Histone Acetyltransferase

Pathway: Epigenetics

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 : 50 mg/mL (154.14 mM; ultrasonic and warming and heat to 80°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.0828 mL	15.4140 mL	30.8280 mL
	5 mM	0.6166 mL	3.0828 mL	6.1656 mL
	10 mM	0.3083 mL	1.5414 mL	3.0828 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: ≥ 1.67 mg/mL (5.15 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 1.67 mg/mL (5.15 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

NiCur is a potent and selective CBP histone acetyltransferase (HAT) inhibitor with an IC_{50} value of 0.35 μM. NiCur, which blocks CBP HAT activity and downregulates p53 activation upon genotoxic stress. NiCur can be used for performing mechanistic studies without affecting the expression of target proteins[1].

IC_{50} & Target

CBP-HAT
0.35 μM (IC_{50})

In Vitro

NiCur (0.5~1 μM; U2OS cells) reduces the Dox-induced p53K382ac, p53S15p, and p53 levels in a dose-dependent manner[1]. NiCur (1.5 μM) reduces the level of H3K27ac. NiCur (1.5 μM; U2OS cells) restores cellular proliferation. NiCur (Intestinal epithelial cells) down-regulates Dox-mediated p53 activation without affecting the levels of H2A.X S139p. NiCur can

modulate the gene regulatory switch for reprogramming chromatin landscape. NiCur blocks CBP HAT activity[1].

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

Western Blot Analysis[1]

Cell Line:	U2OS cells
Concentration:	0.5~1 μM
Incubation Time:	
Result:	Reduced the Dox-induced p53K382ac, p53S15p, and p53 levels in a dose-dependent manner.

REFERENCES

[1]. Vincek AS, et al. Inhibitor of CBP Histone Acetyltransferase Downregulates p53 Activation and Facilitates Methylation at Lysine 27 on Histone H3. Molecules. 2018;23(8):1930. Published 2018 Aug 2.

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