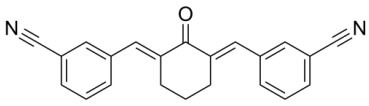
Data Sheet

Product Name:	NiCur
Cat. No.:	CS-0181172
Molecular Formula:	$C_{22}H_{16}N_2O$
Molecular Weight:	324.38
Target:	Histone Acetyltransferase
Pathway:	Epigenetics
Solubility:	DMSO : 50 mg/mL (154.14 mM; ultrasonic and warming and heat to 80°C)



BIOLOGICAL ACTIVITY:

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]. IC50 & Target:IC50: 0.35 μM (CBP HAT)[1] **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].

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.

CAIndexNames:

3,3'-((1E,1'E)-(2-Oxocyclohexane-1,3-diylidene)bis(methanylylidene))dibenzonitrile

SMILES:

N#CC1=CC=CC(/C=C2C(/C(CCC/2)=C/C3=CC(C#N)=CC=C3)=O)=C1

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