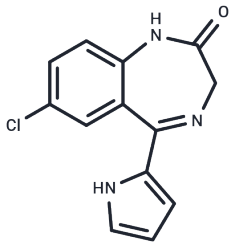
Data Sheet (Cat.No.T4687)

TargetMol

Ro5-3335

Chemical Properties



CAS No. : 30195-30-3

Formula: C13H10ClN3O

Molecular Weight: 259.69

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Ro5-3335 (CBFβ-Runx1 inhibitor II) is core binding factor (CBF) inhibitor; preferentially kills human leukemia cell lines with CBF fusion proteins (IC50 = 1.1 μM). Ro5-3335 represses RUNX1/CBFβ-dependent transactivation in reporter assays and inhibits transcriptional regulation by RUNX1 and CBFβ. Ro5-3335 also reduces the leukemia burden in a mouse model. Attenuates RUNX1-dependent hematopoiesis in zebrafish embryos. It also is a Tat antagonist and inhibits HIV-1 replication in vitro.
Targets(IC50)	DNA/RNA Synthesis

Solubility Information

Solubility	DMSO: 60 mg/mL (231.04 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.8507 mL	19.2537 mL	38.5075 mL
5 mM	0.7701 mL	3.8507 mL	7.7015 mL
10 mM	0.3851 mL	1.9254 mL	3.8507 mL
50 mM	0.077 mL	0.3851 mL	0.7701 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Cunningham L, et al.Identification of benzodiazepine Ro5-3335 as an inhibitor of CBF leukemia through quantitative high throughput screen against RUNX1-CBFβ interaction.Proc Natl Acad Sci U S A. 2012 Sep 4;109(36): 14592-7.

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Cupelli LA, Hsu MC.The human immunodeficiency virus type 1 Tat antagonist, Ro 5-3335, predominantly inhibits transcription initiation from the viral promoter.J Virol. 1995 Apr;69(4):2640-3.

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Cui X, Huo D, Wang Q, et al.RUNX1/NPM1/H3K4me3 complex contributes to extracellular matrix remodeling via enhancing FOSL2 transcriptional activation in glioblastoma.Cell Death & Disease.2024, 15(1): 98.

Wang Y, Wang Q, Wang B, et al. Inhibition of EZH2 ameliorates bacteria-induced liver injury by repressing RUNX1 in dendritic cells[J]. Cell death & disease. 2020, 11(11): 1-13.