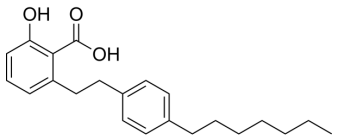
MG 149

Cat. No.:	HY-15887
CAS No.:	1243583-85-8
Molecular Formula:	$C_{22}H_{28}O_3$
Molecular Weight:	340.46
Target:	Histone Acetyltransferase; Epigenetic Reader Domain; Apoptosis
Pathway:	Epigenetics; Apoptosis
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (293.72 mM; Need ultrasonic)
H_2O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.9372 mL	14.6860 mL	29.3720 mL
	5 mM	0.5874 mL	2.9372 mL	5.8744 mL
	10 mM	0.2937 mL	1.4686 mL	2.9372 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: ≥ 2.75 mg/mL (8.08 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.75 mg/mL (8.08 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

MG149 (Tip60 HAT inhibitor) is a selective and potent Tip60 inhibitor with IC_{50} of 74 uM, similar potentcy for MOF (IC_{50}= 47 uM); little potent for PCAF and p300 (IC_{50} >200 uM)[1].

IC_{50} & Target	CBP/p300	TIP60

In Vitro

MG 149 (Tip60 HAT inhibitor), at 200 μM, inhibited about 90% of Tip60 activity but had no inhibitory impact on p300 and PCAF. MG 149 was essentially competitive with Ac-CoA and noncompetitive with the histone substrate. HAT inhibition studies with MG 149 demonstrated that both compounds inhibited the HAT activity of the nuclear extracts of different regions significantly ($p < 0.05$)[1].

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

CUSTOMER VALIDATION

- Int J Biol Sci. 2024 Jan 12;20(3):968-986.
- Cell Death Dis. 2022 Aug 17;13(8):717.
- iScience. 2023 Nov 14.
- Front Cell Infect Microbiol. 19 July 2021.
- Int J Mol Sci. 2023 Mar 3.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Ghizzoni M, et al. 6-alkylsalicylates are selective Tip60 inhibitors and target the acetyl-CoA binding site. Eur J Med Chem. 2012 Jan;47(1):337-44.

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