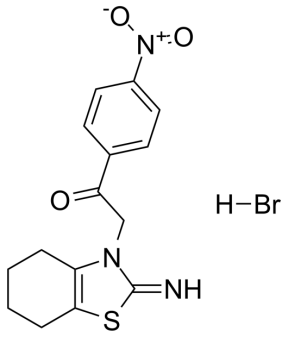
p-nitro-Pifithrin-α

Cat. No.:	HY-130437
CAS No.:	389850-21-9
Molecular Formula:	$C_{15}H_{16}BrN_3O_3S$
Molecular Weight:	398.27
Target:	MDM-2/p53; TGF-β Receptor; Caspase
Pathway:	Apoptosis; TGF-beta/Smad
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 1 mg/mL (2.51 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.5109 mL	12.5543 mL	25.1086 mL
	5 mM	---	---	---
	10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

p-nitro-Pifithrin-α, a cell-permeable analog of pifithrin-α, is a potent p53 inhibitor. p-nitro-Pifithrin-α suppresses p53-mediated TGF-β1 expression in HK-2 cells. p-nitro-Pifithrin-α inhibits the activation of caspase-3 by Zika virus (ZIKV) strains. p-nitro-Pifithrin-α attenuates steatosis and liver injury in mice fed a high-fat diet [4].non-alcoholic fatty liver disease[1][2][3].

IC_{50} & Target

Caspase-3

REFERENCES

[1]. Shimizu H, Yisireyili M, Nishijima F, Niwa T. Indoxyl sulfate enhances p53-TGF-β1-Smad3 pathway in proximal tubular cells. Am J Nephrol. 2013;37(2):97-103.

[2]. Zhang F, et al. Molecular signatures associated with ZIKV exposure in human cortical neural progenitors. Nucleic Acids Res. 2016 Oct 14;44(18):8610-8620.

[3]. Derdak Z, et al. Inhibition of p53 attenuates steatosis and liver injury in a mouse model of non-alcoholic fatty liver disease. J Hepatol. 2013 Apr;58(4):785-91.

Caution: Product has not been fully validated for medical applications. For research use only.

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