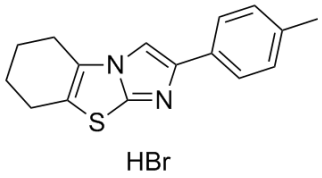
Pifithrin-β hydrobromide

Cat. No.:	HY-16702A		
CAS No.:	511296-88-1		
Molecular Formula:	$C_{16}H_{17}BrN_2S$		
Molecular Weight:	349.29		
Target:	MDM-2/p53		
Pathway:	Apoptosis		
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 : 26 mg/mL (**74.44 mM;** Need ultrasonic and warming)

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1 mg	5 mg	10 mg
1 mM	2.8630 mL	14.3148 mL	28.6295 mL
5 mM	0.5726 mL	2.8630 mL	5.7259 mL
10 mM	0.2863 mL	1.4315 mL	2.8630 mL

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

BIOLOGICAL ACTIVITY

Description	Pifithrin-β hydrobromide is a potent **p53** inhibitor with an **IC_{50}** of 23 μM.
IC_{50} & Target	IC50: 23 μM (p53)[1]
In Vitro	Pifithrin-α hydrobromide, an inhibitor of the p53 protein, is regarded as a lead compound for cancer and neurodegenerative disease therapy. Pifithrin-α is very unstable in culture medium and rapidly converts to its condensation product pifithrin-β, the N-acetyl derivative[2]. After 24 h, the viability assay shows that the pretreatments with 1 and 10 μM pifithrin-β exerts neuroprotective effects[3].

CUSTOMER VALIDATION

- **PLoS One**. 2018 Sep 20;13(9):e0203833.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Christodoulou MS, et al. Synthesis and biological evaluation of imidazolo[2,1-b]benzothiazole derivatives, as potential p53 inhibitors. Bioorg Med Chem. 2011 Mar 1;19(5):1649-57.

[2]. Fernández-Cruz ML, et al. Biological and chemical studies on aryl hydrocarbon receptor induction by the p53 inhibitor pifithrin-α and its condensation productpifithrin-β. Life Sci. 2011 Apr 25;88(17-18):774-83.

[3]. Da Pozzo E, et al. p53 functional inhibitors behaving like pifithrin-β counteract the Alzheimer peptide non-β-amyloid component effects in human SH-SY5Y cells. ACS Chem Neurosci. 2014 May 21;5(5):390-9.

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