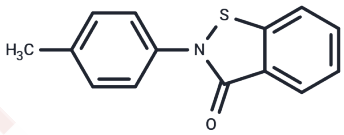
Data Sheet (Cat.No.T16435)

TargetMol

PBIT

Chemical Properties



CAS No. : 2514-30-9

Formula: C14H11NOS

Molecular Weight: 241.31

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	PBIT inhibits JARID1B histone demethylase (IC50 of about 3 μM). PBIT also inhibits JARID1A and JARID1C (IC50s of 6 μM and 4.9 μM, respectively). PBIT is a specific inhibitor of the Jumonji AT-rich Interactive Domain 1 (JARID1) enzymes .
Targets(IC50)	Histone Demethylase,Histone Methyltransferase
In vitro	PBIT, which inhibits JARID1B with an IC50 of about 3 μm in vitro.?Consistent with this, PBIT treatment inhibited removal of H3K4me3 by JARID1B in cells.?Furthermore, this compound inhibited proliferation of cells expressing higher levels of JARID1B.

Solubility Information

Solubility	DMSO: 16.88 mg/mL (69.95 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 1.69 mg/mL (7 mM),Suspension. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (16.58 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.144 mL	20.7202 mL	41.4405 mL
5 mM	0.8288 mL	4.144 mL	8.2881 mL
10 mM	0.4144 mL	2.072 mL	4.144 mL
50 mM	0.0829 mL	0.4144 mL	0.8288 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Sayegh J, et al. Identification of small molecule inhibitors of Jumonji AT-rich interactive domain 1B (JARID1B) histone demethylase by a sensitive high throughput screen. J Biol Chem. 2013 Mar 29;288(13):9408-17.