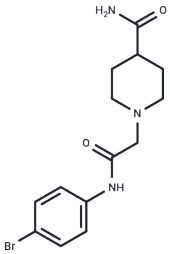
Data Sheet (Cat.No.T5322)

TargetMol

BCI-121

Chemical Properties



CAS No. : 432529-82-3

Formula: C14H18BrN3O2

Molecular Weight: 340.22

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	BCI-121 is a substrate-competitive SMYD3 inhibitor that inhibits the proliferation of the cancer cell.
Targets(IC50)	Histone Methyltransferase
In vitro	BCI-121 significantly reduced the proliferation of HT29 (by 46%) and HCT116 (by 54%) cells at 72 h and decreased the expression levels of SMYD3 target genes. BCI-121 treatment only affected proliferation of cancer cell lines expressing high levels of SMYD3. The high levels of SMYD3 expression detected in OVCAR-3 cells, along with the strong reduction in proliferation rate observed upon BCI-121 treatment.
Cell Research	Cell proliferation is determined using the cell proliferation reagent WST-1. Cells are seeded into 96-well plates one day before treatment. After 48 h, 72 h, or 96 h of BCI-121 or DMSO exposure, 10 μL of the Cell Proliferation Reagent WST-1 are added to each well and incubated at 37 °C in a humidified incubator for up to 1 h. Absorbance is measured on a microplate reader at 450/655 nm. The proliferation index is calculated as the ratio of WST-1 absorbance of treated cells to WST-1 absorbance of control cells.

Solubility Information

Solubility	DMSO: 100 mg/mL (293.93 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (11.76 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	2.9393 mL	14.6964 mL	29.3927 mL
5 mM	0.5879 mL	2.9393 mL	5.8785 mL
10 mM	0.2939 mL	1.4696 mL	2.9393 mL
50 mM	0.0588 mL	0.2939 mL	0.5879 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

Peserico A, et al. A SMYD3 Small-Molecule Inhibitor Impairing Cancer Cell Growth. J Cell Physiol. 2015 Oct;230(10): 2447-2460.