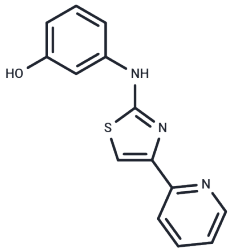
Data Sheet (Cat.No.T8554)

TargetMol

KCC-07

Chemical Properties



CAS No. : 315702-75-1

Formula: C14H11N3OS

Molecular Weight: 269.32

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	KCC-07 is a selective, potent and brain-penetrant inhibitor of methyl-CpG-binding domain protein 2(MBD2) with anticancer activity. KCC-07 prevents binding of MBD2 to methylated DNA and activates brain specific angiogenesis inhibitor 1 (BAI1) inducing anti-proliferative BAI1/p53/p21 signaling.
Targets(IC50)	DNA Alkylator/Crosslinker
In vitro	In vitro, KCC-07 treatment Medulloblastomas (MB) cells?clearly inhibited MB cell growth, consistent with induction of anti-proliferative BAI1/p53/p21 signaling
Cell Research	KCC-07?treatment?Medulloblastomas (MB) cells, Concentration with?10 μM and? Incubation Time with?72 hours

Solubility Information

Solubility	DMSO: 22.5 mg/mL (83.54 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: 2 mg/mL (7.43 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	3.7131 mL	18.5653 mL	37.1306 mL
5 mM	0.7426 mL	3.7131 mL	7.4261 mL
10 mM	0.3713 mL	1.8565 mL	3.7131 mL
50 mM	0.0743 mL	0.3713 mL	0.7426 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

Dan Zhu, et al. BAI1 Suppresses Medulloblastoma Formation by Protecting p53 From Mdm2-Mediated Degradation. Cancer Cell. 2018 Jun 11;33(6):1004-1016.e5.