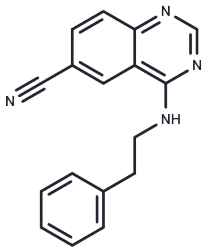
Data Sheet (Cat.No.T5673)

TargetMol

Senexin A

Chemical Properties



CAS No. : 1366002-50-7

Formula: C17H14N4

Molecular Weight: 274.32

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	Senexin A is an effective and selective CDK8 inhibitor that also inhibits CDK19 with Kd values of 0.83 microns and 0.31 microns, respectively.
Targets(IC50)	CDK
In vitro	Senexin A inhibited CDK8 and CDK19 ATP site binding with Kd50 of 0.83 μM and 0.31 μM, respectively and CDK8 kinase activity with IC50 of 0.28 μM.CDK8 stimulates Wnt/β-catenin, and Senexin A inhibits β-catenin–dependent transcription in HCT116 colon carcinoma cells.
In vivo	Administering Senexin A daily for five days completely counteracts the tumor-promoting effects of chemotherapy, displaying no detectable toxicity or significant impacts on body weight, organ weights, or blood cell counts in C57BL/6 mice. The adverse effects of doxorubicin treatment are entirely negated when followed by Senexin A administration, significantly enhancing the responsiveness of A549/MEF tumors to doxorubicin.
Animal Research	Tumor-free C57BL/6-derived SCID mice were injected with a single dose of doxorubicin or carrier control.?Five days later, mice received. injection of 2 × 10^6 human A549 lung carcinoma cells, and tumor take was measured over 4 wk.

Solubility Information

Solubility	DMSO: 100 mg/mL (364.54 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: 4 mg/mL (14.58 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	3.6454 mL	18.2269 mL	36.4538 mL
5 mM	0.7291 mL	3.6454 mL	7.2908 mL
10 mM	0.3645 mL	1.8227 mL	3.6454 mL
50 mM	0.0729 mL	0.3645 mL	0.7291 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

Porter D C , Farmaki E , Altilia S , et al. Cyclin-dependent kinase 8 mediates chemotherapy-induced tumor-promoting paracrine activities[J]. Proceedings of the National Academy of Sciences, 2012, 109(34):13799-13804.