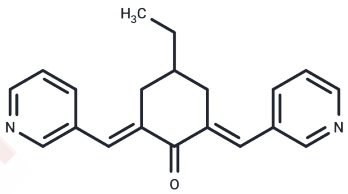
Data Sheet (Cat.No.T6886)

TargetMol

MCB-613

Chemical Properties



CAS No. : 1162656-22-5

Formula: C20H20N2O

Molecular Weight: 304.39

Storage: Keep away from moisture,Store at low temperature
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	MCB-613 is an effective steroid receptor coactivator (SRC) stimulator.
Targets(IC50)	Apoptosis,Reactive Oxygen Species,ROS,Src
In vitro	MCB-613 selectively and reversibly binds to the RID of SRC-3, and selectively kills cancer cells including MCF-7 (breast), PC-3 (prostate), H1299 (lung), and HepG2 (liver) cells, without toxicity to mouse primary hepatocytes and mouse embryonic fibroblasts (MEFs). MCB-613 also increases SRCs' interactions with other coactivators and markedly induces ER stress coupled to the generation of reactive oxygen species (ROS). [1]
In vivo	In an MCF-7 breast cancer mouse xenograft model, MCB-613 (20 mg/kg, i.p.) significantly and dramatically inhibits the growth of the tumor while causing no obvious animal toxicity and body weight less. [1]
Kinase Assay	Luciferase assays: After various compound treatments, cells are lysed in luciferase lysis buffer and assayed for luciferase activity using the ONE-Glo luciferase assay system. All luciferase activities are normalized to protein concentration determined by Bradford assay.
Cell Research	Cells are seeded in 96-well plates and allowed to reach 60% to 70% confluence. After indicated compound treatments, relative numbers of viable cells are measured by MTS assay using the Cell Titer 96 Aqueous One Solution Cell Proliferation Assay.(Only for Reference)

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 56 mg/mL (183.97 mM),Sonication is recommended. DMSO: 56 mg/mL (183.97 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 (6.57 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*

In vivo Formulation	*vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2853 mL	16.4263 mL	32.8526 mL
5 mM	0.6571 mL	3.2853 mL	6.5705 mL
10 mM	0.3285 mL	1.6426 mL	3.2853 mL
50 mM	0.0657 mL	0.3285 mL	0.6571 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

Wang L, et al. Cancer Cell. 2015, 28(2), 240-252.