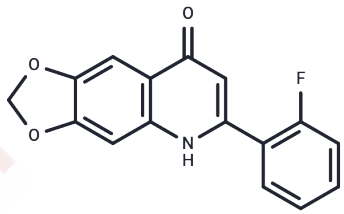
Data Sheet (Cat.No.T22661)

TargetMol

CHM-1

Chemical Properties



CAS No. : 154554-41-3

Formula: C16H10FNO3

Molecular Weight: 283.25

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	CHM-1 is an inducer of apoptosis, and displays potent antitumor ability in human hepatocellular carcinoma by activation of Cdc2 kinase activity. CHM-1 inhibits tubulin polymerization in vitro and in vivo.
Targets(IC50)	Apoptosis,Microtubule Associated
In vitro	CHM-1 (0-10 μM; 24 hours) significantly increased the binding of cyclin B1 to Cdc2 and induced change in expressed and phosphorylated status of G2-M regulators in HA22T cells. CHM-1 (0-100μM; 24 hours) induced significant concentration-dependent growth inhibition in HA22T, Hep3B, and HepG2 cells, with the most potent effects observed in HA22T cells with an IC50 of 0.75 μM)[3].
In vivo	In male severe combined immunodeficient mice, CHM-1 (10 mg/kg; i.p.) induced inhibition of HA22T tumor growth in a dose-dependent manner[3].

Solubility Information

Solubility	DMSO: 1.42 mg/mL (5.01 mM),Sonication is recommended. H2O: < 7.08 mg/mL,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.5305 mL	17.6523 mL	35.3045 mL
5 mM	0.7061 mL	3.5305 mL	7.0609 mL
10 mM	0.353 mL	1.7652 mL	3.5305 mL
50 mM	0.0706 mL	0.353 mL	0.7061 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

Liu CW, et al. CHM-1, a novel microtubule-destabilizing agent exhibits antitumor activity via inducing the expression of SIRT2 in human breast cancer cells. Chem Biol Interact. 2018 Jun 1;289:98-108.
Tsai AC, et al. CHM-1, a new vascular targeting agent, induces apoptosis of human umbilical vein endothelial cells via p53-mediated death receptor 5 up-regulation. J Biol Chem. 2010 Feb 19;285(8):5497-506.
Wang SW, et al. CHM-1, a novel synthetic quinolone with potent and selective antimitotic antitumor activity against human hepatocellular carcinoma in vitro and in vivo. Mol Cancer Ther. 2008 Feb;7(2):350-60.