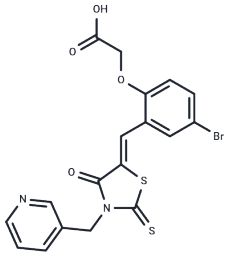
Data Sheet (Cat.No.T4253)

TargetMol

Skp2 Inhibitor C1

Chemical Properties



CAS No. : 432001-69-9

Formula: C18H13BrN2O4S2

Molecular Weight: 465.34

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	Skp2 Inhibitor C1 (SKPin C1)(SKPin C1) is a specific small molecule inhibitor of Skp2-mediated p27 degradation.
Targets(IC50)	E1/E2/E3 Enzyme
In vitro	in vitro: T47D cells treated with C1 (5 μM for 16 hours) displayed an increase in G1 phase ($p < 0.0001$) and a decrease in S phase ($p < 0.0001$), correlating with p27 protein induction. In contrast, MCF-7 cells responded to C1 with a significant reduction in G1 phase (35%, $p < 0.0001$) and an increase in G2-M phase (43%, $p < 0.0001$). This G1 reduction and G2/M arrest is dose dependent on C1 and correlates with increased p27 protein levels.
Kinase Assay	To test enzyme activity of NOS, the lysate from RAW264.7 cells (a protein concentration of 37.5 μg/200 μL) is incubated for 3 h at 37°C with 100 mM of L-arginine in the presence of Esonarimod (KE-298) and the conversion of L-arginine to nitrite is monitored.

Solubility Information

Solubility	DMSO: 50 mg/mL (107.45 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 2.5 mg/mL (5.37 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	2.149 mL	10.7448 mL	21.4897 mL
5 mM	0.4298 mL	2.149 mL	4.2979 mL
10 mM	0.2149 mL	1.0745 mL	2.149 mL
50 mM	0.043 mL	0.2149 mL	0.4298 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

Wu L, et al. Specific small molecule inhibitors of Skp2-mediated p27 degradation. Chem Biol. 2012 Dec 21;19(12): 1515-24.

Pavlides SC, et al. Inhibitors of SCF-Skp2/Cks1 E3 ligase block estrogen-induced growth stimulation and degradation of nuclear p27kip1: therapeutic potential for endometrial cancer. Endocrinology. 2013 Nov;154(11): 4030-45.