

www.ptgcn.com

## Catalog Number: CM03700

产品信息

Catalog Number: CM03700

CAS号: 1020149-73-8

分子式: C<sub>27</sub>H<sub>23</sub>N<sub>7</sub>O

主要靶点: Apoptosis|DNA Methyltransferase 主要通路: 表观遗传|凋亡 分子量: 461.52 溶解度:

DMSO:23.1 mg/mL (50 mM)

靶点活性

DNMT3B:7.5  $\mu$  M|DNMT3a:8  $\mu$  M|DNMT1:6  $\mu$  M

体内活性

在U937人白血病细胞系中,SGI-1027(0-100 μ M)显示出适度的促凋亡作用,单不影响细胞周期。SGI-1027可直接抑制DNMTs使 DNA甲基化受到抑制,并使各种人癌细胞系中的DNMT1选择性降解。在大鼠肝癌H4IIE细胞中,SGI-1027毒性很小或没有。

细胞实验

Rat hepatoma H4IIE cells are used as the test system. These cells are grown in DMEM supplemented with fetal bovine serum (10%) and calf serum (10%). Cells are seeded into 96-well plates and after 48 h exposed to SGI-1027 at concentrations ranging from 0 to 300  $\mu$  Mol/L. The solubility is determined by Nephalometry techniques immediately after dosing and before harvesting the cells at 24 h. Following the exposure period, the cells or their supernatant (culture medium) are analyzed for changes in cell proliferation (propidium iodide), membrane leakage (  $\alpha$  -GST), mitochondrial function [3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide and cellular ATP], oxidative stress (intracellular GSH and 8-isoprostane), and apoptosis. The half-maximal toxic concentration (TC50) is determined from the dose-response curves.(Only for Reference)

描述

SGI-1027 (DNA Methyltransferase Inhibitor II) is an effective and selective inhibitor of DNA methyltransferase (DNMT). The IC50 of SGI-1027(SGI1027) against DNMT1, DNMT3A, and DNMT3B are 6, 8, 7.5  $\,\mu$  M, respectively.

储仔

Powder: -20°C for 3 years | In solvent: -80°C for 2 years