

Catalog Number: CM04560

产品信息

Catalog Number:
CM04560

分子量:
539.67

CAS号:
1338466-77-5

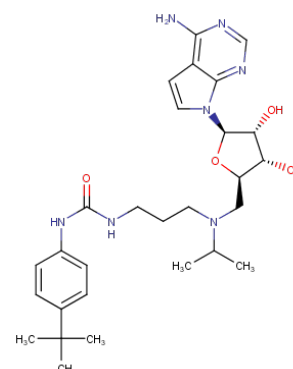
溶解度:

分子式:
 $C_{28}H_{41}N_7O_4$

DMSO:54 mg/mL (100
mM),Ethanol:54 mg/mL (100 mM)

主要靶点:
Histone
Methyltransferase|Apoptosis

主要通路：
凋亡|表观遗传



靶点活性

DOT1L:0.4 nM

体外活性

EP7004777对MLL白血病小鼠移植瘤模型产生有效的抗肿瘤功效,且平均寿命显著延长。

体内活性

在抑制DOT1L后,EPZ004777选择性抑制MLL重排细胞系和MLL-AF9转化的鼠造血细胞的增殖。EPZ004777也诱导MLL基因重排的细胞系分化和凋亡。EPZ004777选择性抑制细胞H3K79甲基化,并抑制关键MLL融合靶基因的表达。EPZ004777选择性抑制MLL-AF10和CALM-AF10转化的小鼠造血细胞增殖。EPZ004777抑制DOT1L后,导致MLL-AF6转化的鼠造血细胞的增殖明显降低,MLL-AF6靶基因表达降低和细胞周期停滞。

细胞实验

For assessment of cell proliferation and viability in human cell lines, exponentially growing cells are plated, in triplicate, in 96-well plates in a final volume of 150 µl. Cells are incubated in the presence of 3 µM; M (proliferation curve), or increasing concentrations (IC50 determination) of EPZ004777 up to 50 µM; M. Viable cell number is determined every 3 days for up to 18 days using the Guava Viacount assay and analyzed on a Guava EasyCyte Plus instrument according to the manufacturer's protocol. On days of cell counts, growth media and EPZ004777 are replaced and cells split back to a density of 5 times; 104 cells/well. Total cell number is expressed as split-adjusted viable cells per well. For each cell line, IC50 values are determined from concentration-dependence curves at each time point using Graphpad Prism software. Experiments to determine IC50 values continues until IC50 values stabilized (day 18 for THP-1 cells, day 14 for all other cell lines). For assessment of the effect of EPZ004777 treatment on transformed murine hematopoietic progenitors, cells from two independent transductions for each virus are plated in 24-well plates at a density of 0.5 times; 105 cell/well in 1 ml media in 24-well plates and exposed to increasing concentrations of EPZ004777 up to 30 mM. Cells are counted and replated at equal cell numbers in fresh media with fresh compound every 3 days. For MTT assays, cells from serial replatings are harvested on day 10 and plated, in triplicate at 2 times; 104 cells/well in 100 µl media with the appropriate concentration of EPZ004777. Cells are incubated for 2.5 days, the exposed to 10 µl MTT reagent for 3 hr, and lysed over night in 100 µl MTT- solubilization buffer (both from Cell Proliferation Kit I [MTT]). (Only for Reference)

描述

EPZ004777 is a potent, selective DOT1L inhibitor with IC₅₀ of 0.4 nM.

儲存

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