

Catalog Number: CM01636

产品信息

Catalog Number:
CM01636

CAS号:
128446-35-5

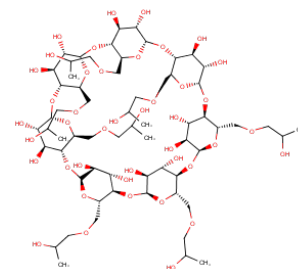
分子式:
 $C_{63}H_{112}O_{42}$

主要靶点:
Others

主要通路:
其他

分子量:
1541.5

溶解度:
H2O:50 mg/mL, Sonification is recommended, DMSO:150 mg/mL



体外活性

Cell treatment with (2-hydroxypropyl)- β -cyclodextrin can activate the activation of the transcription factor EB (the main regulator of lysosomal function and autophagy) and enhance the cell's autophagy clearance ability[1]. (2-Hydroxypropyl)- β -cyclodextrin treatment reduces intracellular cholesterol resulting in significant leukemic cell growth inhibition through G2/M cell-cycle arrest and apoptosis. The IC₅₀ values for (2-Hydroxypropyl)- β -cyclodextrin after 72 hours exposure are in the range of 3.86–10.09 mM. (2-Hydroxypropyl)- β -cyclodextrin also shows anticancer effects against CML cells expressing a T315I BCR-ABL mutation (that confers resistance to most ABL tyrosine kinase inhibitors), and hypoxia-adapted CML cells that have characteristics of leukemic stem cells. In addition, colony forming ability of human primary AML and CML cells is inhibited by (2-Hydroxypropyl)- β -cyclodextrin[2].

体内活性

Intraperitoneal injection of (2-Hydroxypropyl)- β -cyclodextrin significantly improves survival in leukemia mouse models. Systemic administration of (2-Hydroxypropyl)- β -cyclodextrin to mice has no significant adverse effects[2].

描述

(2-Hydroxypropyl)- β -cyclodextrin is a widely used drug delivery vehicle to improve stability and bioavailability.

储存

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