Product Name: HLI 373

Revision Date: 6/30/2016

Product Data Sheet

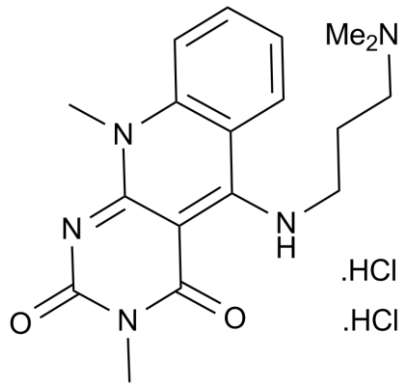
Chemical Properties

Product Name: HLI 373

Cas No.: 502137-98-6

M.Wt: 414.33

Formula: C18H23N5O2.2HCl



Chemical Name: 5-((3-(dimethylamino)propyl)amino)-3,10-dimethylpyrimido[4,5-b]quinoline-2,4(3H,10H)-dione dihydrochloride

Canonical SMILES: O=C(C1=C(NCCCN(C)C)C2=C(N(C)C1=N3)C=CC=C2)N(C)C3=O.Cl.Cl

Solubility: Limited solubility

Storage: Desiccate at RT

General tips: For obtaining a higher solubility , please warm the tube at 37° C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20° C for several months.

Shopping Condition: Evaluation sample solution : ship with blue ice
All other available size: ship with RT , or blue ice upon request

Biological Activity

Targets : Apoptosis

Pathways: p53

Description:

IC50: N/A
HLI 373 is an inhibitor of Hdm2 ubiquitin ligase (E3).
Hdm2 ubiquitin ligase(E3) is a major regulator of p53 by promoting its ubiquitylation and proteasomal degradation. Therefore, blocking Hdm2-mediated activities may be a therapeutic approach for cancers expressing wild-type p53 [1].

In vitro: HLI373 effectively induces apoptosis of several tumor cells that are sensitive to DNA-damaging agents. HLI373-treated cells showed significantly more DNA retained on the filter, indicating that it does not induce single-strand break in U2OS cells. Having no discernable effect on gp78 or AO7, HLI373 seems prefer to inhibit the ubiquitin ligase activity of Hdm2. Treatment of U2OS cells with HLI373 at 10 Amol/L also leaded to a marked decrease in ubiquitylated species immunoprecipitated with anti-Hdm2, whereas the level of immunoprecipitated Hdm2 increased. Inhibition of Hdm2-mediated ubiquitylation in cells can trigger stabilization of both p53 and Hdm2 and preferential killing of tumor cells expressing wild-type p53. HLI373 increased p53 through inhibiting Hdm2-mediated ubiquitylation and not by inducing a DNA damage response in U2OS cells. HLI373 has high potency in stabilizing Hdm2 and p53. HLI373 inhibits the ubiquitin ligase activity of Hdm2 and induces a wild-type p53-dependent apoptosis in several tumor cells that are sensitive to DNA-damaging agents [1,2].
In vivo: So far, no study in vivo has been conducted.
Clinical trial: So far, no clinical study has been conducted.

***Reference**:*

[1]. Kitagaki J, Agama KK, Pommier Y, et al. Targeting Tumor Cells Expressing p53 with a Water-soluble Inhibitor of Hdm2. Molecular Cancer Therapeutics, 2008; 7(8): 2445-1454.
[2]. Yang Y, Kitagaki J, Wang H, Hou DX, Perantoni AO. Targeting the Ubiquitin-proteasome System for Cancer Therapy. Cancer Science, 2009, 100(1): 24-28.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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