

HLI 373

Chemical Properties

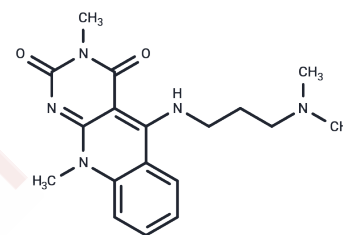
CAS No. : 502137-98-6

Formula: C₁₈H₂₃N₅O₂

Molecular Weight: 341.41

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	HLI373 is an efficacious Hdm2 inhibitor, an ubiquitin ligase (E3), effective in inducing apoptosis of several tumor cells sensitive to DNA-damaging agents [1], and also shows prominent antimalarial activity [2].
Targets(IC50)	Apoptosis,Others,Parasite,MDM-2/p53
In vitro	HLI373, at concentrations ranging from 3-15 μ M over 15 hours, preferentially induces cell death in tumor cells harboring wild type p53, according to study [1]. At higher doses (10-50 μ M), it dose-dependently stabilizes Hdm2, while a lower concentration of 3 μ M activates p53 transcription. This compound effectively blocks the auto-ubiquitylation of Hdm2 and, when cells are co-transfected with p53 and Hdm2, HLI373 can prevent the degradation of p53, especially at 5-10 μ M after 8 hours of treatment. Moreover, it increases both p53 and Hdm2 protein levels in cells. Notably, HLI373 demonstrates potent activity against both chloroquine-sensitive and resistant strains of <i>P. falciparum</i> , displaying IC ₅₀ values below 6 μ M and inducing early growth inhibition. Functioning as an MDM2 inhibitor by targeting its C-terminus, HLI373 disrupts the ubiquitin E3 ligase activity of MDM2, which is key to the ubiquitylation of p53, highlighting its potential in cancer therapy. In cell viability assays, it was shown to cause increased cell death in wild type p53 mouse embryo fibroblasts (MEFs) in a dose-dependent manner, whereas p53-deficient MEFs exhibited resistance. Western blot analyses revealed that the compound prevents p53 degradation in U2OS cells when co-transfected with p53 and Hdm2 encoding plasmids.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.929 mL	14.6451 mL	29.2903 mL
5 mM	0.5858 mL	2.929 mL	5.8581 mL
10 mM	0.2929 mL	1.4645 mL	2.929 mL
50 mM	0.0586 mL	0.2929 mL	0.5858 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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