

C-02

Chemical Properties

CAS No. :

Formula: C₃₂H₂₈Cl₂N₆O₅

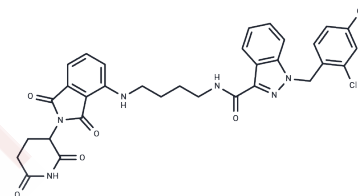
Molecular Weight: 647.51

Keep away from direct sunlight

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	C-02, a proteolysis-targeting chimera (PROTAC) that combines the hexokinase inhibitor lonidamine with the cereblon ligand thalidomide, effectively induces the degradation of hexokinase 2 in 786-O and PANC-1 cells at a concentration of 20 μ M. This compound exhibits cytotoxicity to a range of cancer cells, including 786-O, 4T1, PANC-1, HGC-27, and MCF-7, with IC ₅₀ values of 34.07 μ M, 5.08 μ M, 31.53 μ M, 6.11 μ M, and 21.65 μ M, respectively. Additionally, at 20 μ M, C-02 diminishes both the extracellular acidification rate (ECAR) and oxygen consumption rate (OCR) in 4T1 cells, suggesting a suppression of glycolysis and mitochondrial damage. In vivo studies reveal that at a dosage of 50 mg/kg, C-02 not only reduces tumor volume but also promotes intratumoral cytokine accumulation and triggers pyroptosis in a 4T1 murine mammary carcinoma model.
Targets(IC ₅₀)	Others

Solubility Information

Solubility	Methanol: Soluble Ethanol: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5444 mL	7.7219 mL	15.4438 mL
5 mM	0.3089 mL	1.5444 mL	3.0888 mL
10 mM	0.1544 mL	0.7722 mL	1.5444 mL
50 mM	0.0309 mL	0.1544 mL	0.3089 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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