

Targapremir-210

Chemical Properties

CAS No. : 1049722-30-6

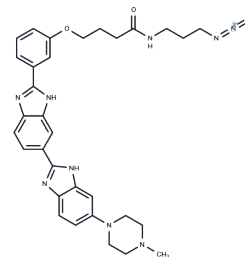
Formula: C32H36N10O2

Molecular Weight: 592.69

Store at low temperature

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	Targapremir-210 (TGP-210) is a selective and potent inhibitor of miRNA-210 (miRNA-210), which inhibits pre-miR-210 processing and induces apoptosis in breast cancer cells.
Targets(IC50)	Apoptosis, MicroRNA
In vitro	Targapremir-210 selectively reduces mature miR-210 levels in MDA-MB-231 cells under hypoxic conditions, achieving an IC50 of approximately 200 nM[1]. This compound specifically induces apoptosis in MDA-MB-231 cells exposed to hypoxia at 200 nM, while it does not trigger apoptosis in cells cultivated in normoxic environments[1].
In vivo	In vivo, a single intraperitoneal injection of Targapremir-210 (100 µL of 200 nM) impedes the proliferation of MDA-MB-231 triple-negative breast cancer (TNBC) cells. Targapremir-210 successfully reaches the tumor and sustains its presence throughout the entire 21-day period, leading to a reduction in tumor burden in a TNBC mouse model[1].

Solubility Information

Solubility	DMSO: 100 mg/mL (168.72 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (6.75 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6872 mL	8.4361 mL	16.8722 mL
5 mM	0.3374 mL	1.6872 mL	3.3744 mL
10 mM	0.1687 mL	0.8436 mL	1.6872 mL
50 mM	0.0337 mL	0.1687 mL	0.3374 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.

Reference

Costales MG, et al. Small Molecule Inhibition of microRNA-210 Reprograms an Oncogenic Hypoxic Circuit. J Am Chem Soc. 2017 Mar 8; 139(9):3446-3455.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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