

**Product Name:** Targapremir 210

**Catalog No.:** 6586

**Batch No.:** 1

CAS Number: 1049722-30-6

IUPAC Name: *N*-(3-Azidopropyl)-4-[3-[6-(4-methyl-1-piperazinyl)[2,6'-bi-1*H*-benzimidazol]-2'-yl]phenoxy]butanamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>32</sub>H<sub>36</sub>N<sub>10</sub>O<sub>2</sub>·½H<sub>2</sub>O

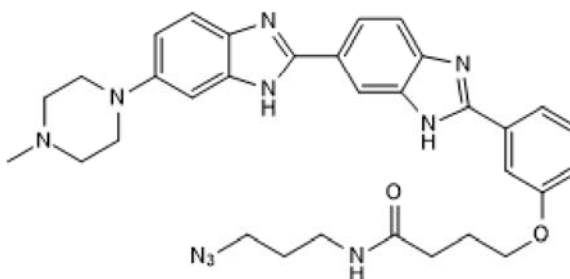
**Batch Molecular Weight:** 601.72

**Physical Appearance:** Yellow solid

**Solubility:** DMSO to 100 mM  
ethanol to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 97.5% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	63.88	6.2	23.28
Found	63.85	6.2	23.11

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Targapremir 210 inhibits formation of mature miR-210 (IC<sub>50</sub> = 200 nM) by binding to Dicer binding site of the miR-210 hairpin precursor (K<sub>d</sub> = 200 nM) and inhibits Dicer processing of the miRNA. Decreases levels of miR-210 and HIF-1α mRNA, and induces apoptosis in MDA-MB-231 cells cultured under hypoxic conditions. Reduces tumor expression of HIF-1α mRNA and miR-210, and tumor growth in a triple negative breast cancer mouse model.

**Physical and Chemical Properties:**

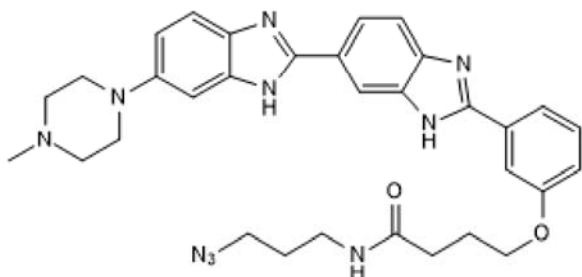
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Batch Molecular Weight: 601.72

Physical Appearance: Yellow solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Costales *et al*** (2017) Small molecule inhibition of microRNA-210 reprograms an oncogenic hypoxic circuit. *J.Am.Chem.Soc.* **139** 3446. PMID: 28240549.

**Childs-Disney *et al*** (2012) Rationally designed small molecules targeting the RNA that causes myotonic dystrophy type 1 are potently bioactive. *ACS.Chem.Biol* **7** 856. PMID: 22332923.

**Storage:** Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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