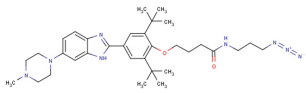
Data Sheet (Cat.No.T16077)

TargetMol
A DRUG SCREENING EXPERT

MIR96-IN-1

Chemical Properties



CAS No.:	1311982-88-3
Formula:	C33H48N8O2
Molecular Weight:	588.79
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	MIR96-IN-1 selectively inhibits biogenesis of microRNA-96, upregulating a protein target (FOXO1) and inducing apoptosis in cancer cells.
Targets(IC_{50})	Others: None
In vitro	MIR96-IN-1 inhibits Drosha cleavage of pri-miR-96, as evidenced by an increase in the levels of pri-miR-96 and a reduction in levels of pre- and mature miR-96 in treated cells, as expected if MIR96-IN-1 binds to the Drosha site. MIR96-IN-1 efficiently and selectively silences production of miR-96 at 40 μM while not affecting miR-182 or -183. MIR96-IN-1 inhibits biogenesis of its target precursor miRNA to varying extents: MIR96-IN-1 reduces the expression level of miR-96 by 90% at 40 μM [1].

Solubility Information

Solubility	DMSO: 100 mg/mL (169.84 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.698 mL	8.492 mL	16.984 mL
5 mM	0.34 mL	1.698 mL	3.397 mL
10 mM	0.17 mL	0.849 mL	1.698 mL
50 mM	0.034 mL	0.17 mL	0.34 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Velagapudi SP, et al. Sequence-based design of bioactive small molecules that target precursor microRNAs. Nat Chem Biol. 2014 Apr;10(4):291-7.

2. Haga CL, et al. Small Molecule Inhibition of miR-544 Biogenesis Disrupts Adaptive Responses to Hypoxia by Modulating ATM-mTOR Signaling. ACS Chem Biol. 2015 Oct 16;10(10):2267-76.

3. Velagapudi SP, et al. Defining the RNA internal loops preferred by benzimidazole derivatives via 2D combinatorial screening and computational analysis. J Am Chem Soc. 2011 Jul 6;133(26):10111-8.

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