



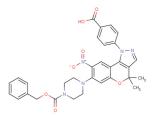
Lin28-let-7a antagonist 1

Chemical Properties

CAS No.: 2024548-03-4 Formula: C31H29N5O7

Molecular Weight: 583.59
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	Lin28-let-7a antagonist 1, with an IC50 of 4.03 μ M for Lin28A-let-7a-1 interaction, and shows a clear antagonistic effect against the Lin28-let-7a interaction.		
Targets(IC ₅₀)	Lin28A-let-7a-1: 4.03 μM		
In vitro	When the expression of both Lin28A and Lin28B are knocked-down using siRNA in JAR cells, the Lin28-let-7a antagonist 1-induced increase in cellular let-7 levels is clearly attenuated. Lin28A-let-7a-IN-1 increases mature let-7 levels in PA-1 cells that express high level of Lin28A. On the other hand, let-7 levels are not affected by 1 in MCF7 cells that rarely express Lin28 proteins. Taken together, Lin28-let-7a antagonist 1 specifically induces the increase in the cellular let-7 levels by targeting Lin28.Lin28-let-7a antagonist 1 shows a clear antagonistic effect against the Lin28A-let-7a-1 interaction with an IC50 of 4.03 µM. Interestingly, Lin28-let-7a antagonist 1 also inhibits the Lin28B-let-7 interaction, with slightly reduced potency. Dicer processing assay reveals that Lin28-let-7a antagonist 1 clearly blocks the formation of the Lin28A-pre-let-7g complex and induces miRNA processing, resulting in the generation of mature let-7g miRNA.		

Solubility Information

Solubility

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.714 mL	8.568 mL	17.135 mL
5 mM	0.343 mL	1.714 mL	3.427 mL
10 mM	0.171 mL	0.857 mL	1.714 mL
50 mM	0.034 mL	0.171 mL	0.343 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 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Lim D, et al. Discovery of a Small-Molecule Inhibitor of Protein-MicroRNA Interaction Using Binding Assay with a Site-Specifically Labeled Lin28. J Am Chem Soc. 2016 Oct 7.

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