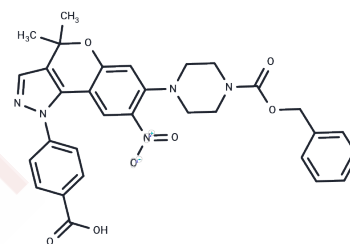


## Lin28-let-7a antagonist 1

## Chemical Properties

CAS No. : 2024548-03-4  
 Formula: C<sub>31</sub>H<sub>29</sub>N<sub>5</sub>O<sub>7</sub>  
 Molecular Weight: 583.59  
 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	Lin28-let-7a antagonist 1, with an IC <sub>50</sub> of 4.03 μM for Lin28A-let-7a-1 interaction, and shows a clear antagonistic effect against the Lin28-let-7a interaction.
Targets(IC <sub>50</sub> )	MicroRNA
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 IC <sub>50</sub> 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	DMSO: 60 mg/mL (102.81 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.7135 mL	8.5677 mL	17.1353 mL
5 mM	0.3427 mL	1.7135 mL	3.4271 mL
10 mM	0.1714 mL	0.8568 mL	1.7135 mL
50 mM	0.0343 mL	0.1714 mL	0.3427 mL

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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

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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