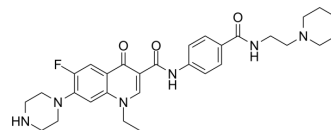


## microRNA-21-IN-1

<b>Cat. No.:</b>	HY-146411		
<b>CAS No.:</b>	2848720-31-8		
<b>Molecular Formula:</b>	C <sub>30</sub> H <sub>37</sub> FN <sub>6</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	548.65		
<b>Target:</b>	MicroRNA; Apoptosis		
<b>Pathway:</b>	Epigenetics; Apoptosis		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (182.27 mM; ultrasonic and warming and heat to 80°C)

Concentration	Solvent	Mass	1 mg			5 mg			10 mg		
			Concentration			Concentration			Concentration		
1 mM			1.8227 mL			9.1133 mL			18.2266 mL		
5 mM			0.3645 mL			1.8227 mL			3.6453 mL		
10 mM			0.1823 mL			0.9113 mL			1.8227 mL		

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: 2.5 mg/mL (4.56 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: 2.5 mg/mL (4.56 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: 2.5 mg/mL (4.56 mM); Clear solution; Need ultrasonic

### BIOLOGICAL ACTIVITY

#### Description

microRNA-21-IN-1 (compound A7) is an efficient microRNA inhibitor. microRNA-21-IN-1 has antiproliferative activity against Hela and HCT-116 cells with IC<sub>50</sub>s of 5.5 μM and 2.8 μM respectively, as well as promotes apoptosis of Hela cells. microRNA-21-IN-1 upregulates the expression of microRNA-21 downstream functional targets (PTEN, EGR1 and SLIT2). microRNA-21-IN-1 can be used for researching anticancer<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

IC<sub>50</sub>: 5.5 μM in Hela, 2.8 μM in HCT-116<sup>[1]</sup>

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## REFERENCES

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[1]. Xi XX, et al. Identification of benzamides derivatives of norfloxacin as promising microRNA-21 inhibitors via repressing its transcription. Bioorg Med Chem. 2022;66:116803.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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