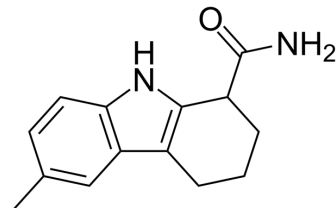


## SIRT1-IN-1

<b>Cat. No.:</b>	HY-136199		
<b>CAS No.:</b>	352554-02-0		
<b>Molecular Formula:</b>	C <sub>14</sub> H <sub>16</sub> N <sub>2</sub> O		
<b>Molecular Weight:</b>	228.29		
<b>Target:</b>	Sirtuin; CMV		
<b>Pathway:</b>	Cell Cycle/DNA Damage; Epigenetics; Anti-infection		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (438.04 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	4.3804 mL	21.9020 mL	43.8039 mL
		5 mM	0.8761 mL	4.3804 mL	8.7608 mL
10 mM		0.4380 mL	2.1902 mL	4.3804 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 5 mg/mL (21.90 mM); Clear solution  2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 5 mg/mL (21.90 mM); Clear solution				

### BIOLOGICAL ACTIVITY

<b>Description</b>	SIRT1-IN-1 is a selective SIRT1 inhibitor with an IC <sub>50</sub> of 0.205 μM. SIRT1-IN-1 inhibits SIRT2 with an IC <sub>50</sub> of 11.5 μM <sup>[1]</sup> . SIRT1-IN-1, a indole, is a cytomegalovirus (CMV) inhibitors and has antiviral activity <sup>[2]</sup> .		
<b>IC<sub>50</sub> &amp; Target</b>	SIRT1 0.205 μM (IC <sub>50</sub> )	SIRT2 11.5 μM (IC <sub>50</sub> )	SIRT3 >100 μM (IC <sub>50</sub> )
<b>In Vitro</b>	SIRT1-IN-1 (compound 2) has little effect on SIRT3 (IC <sub>50</sub> >100 μM) and HDAC (IC <sub>50</sub> >100 μM) <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

---

## CUSTOMER VALIDATION

- J Integr Med. 2021 Nov;19(6):545-554.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

---

## REFERENCES

- [1]. Andrew D Napper, et al. Discovery of Indoles as Potent and Selective Inhibitors of the Deacetylase SIRT1. J Med Chem. 2005 Dec 15;48(25):8045-54.
- [2]. Thomas Shenk, et al. Sirtuin Modulators as Inhibitors of Cytomegalovirus. US20160296523A1.
- 

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA