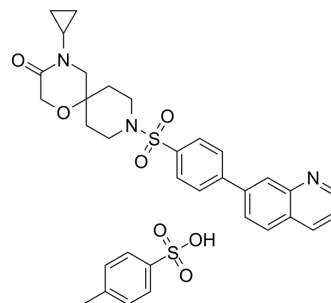


## FASN-IN-4 tosylate

<b>Cat. No.:</b>	HY-12648A
<b>CAS No.:</b>	2095432-57-6
<b>Molecular Formula:</b>	C <sub>33</sub> H <sub>35</sub> N <sub>3</sub> O <sub>7</sub> S <sub>2</sub>
<b>Molecular Weight:</b>	649.78
<b>Target:</b>	Fatty Acid Synthase (FASN); SARS-CoV
<b>Pathway:</b>	Metabolic Enzyme/Protease; Anti-infection
<b>Storage:</b>	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 12.5 mg/mL (19.24 mM; Need ultrasonic)					
	<b>Preparing Stock Solutions</b>	<b>Solvent</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>Concentration</b>				
		<b>1 mM</b>		1.5390 mL	7.6949 mL	15.3898 mL
		<b>5 mM</b>		0.3078 mL	1.5390 mL	3.0780 mL
	<b>10 mM</b>		0.1539 mL	0.7695 mL	1.5390 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 1.25 mg/mL (1.92 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.25 mg/mL (1.92 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 1.25 mg/mL (1.92 mM); Clear solution</li> </ol>					

### BIOLOGICAL ACTIVITY

<b>Description</b>	FASN-IN-4 tosylate is a potent inhibitor of fatty acid synthase (FASN) with an IC <sub>50</sub> of 10 nM (WO2012064642A1, compound 29) <sup>[1]</sup> . FASN-IN-4 tosylate also inhibits SARS-CoV-2 with an EC <sub>50</sub> of 18.6 nM <sup>[2]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 10 nM (FASN) <sup>[1]</sup> EC <sub>50</sub> : 18.6 nM (SARS-CoV-2) <sup>[2]</sup>
<b>In Vitro</b>	The FASN inhibitor, FASN-IN-4 tosylate inhibits SARS-CoV-2 replication, and has the potential for COVID-19 research <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

- Nat Metab. 2021 Sep 27;1-10.
- Cell Biosci. 2022 Sep 16;12(1):158.
- Sci China Life Sci. 2021 May 27;1-21.

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

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## REFERENCES

- [1]. Nicholas D. Adams, et al. Fatty acid synthase inhibitors. WO2012064642A1.
- [2]. Junjun Chu, et al. Pharmacological inhibition of fatty acid synthesis blocks SARS-CoV-2 replication. Nat Metab. 2021 Nov;3(11):1466-1475.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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