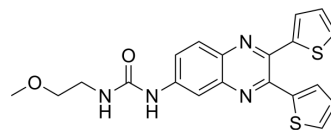


## Ac-CoA Synthase Inhibitor1

Cat. No.:	HY-104032		
CAS No.:	508186-14-9		
Molecular Formula:	C <sub>20</sub> H <sub>18</sub> N <sub>4</sub> O <sub>2</sub> S <sub>2</sub>		
Molecular Weight:	410.51		
Target:	RSV		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 31.25 mg/mL (76.12 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.4360 mL	12.1800 mL	24.3599 mL
		5 mM	0.4872 mL	2.4360 mL	4.8720 mL
10 mM		0.2436 mL	1.2180 mL	2.4360 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.09 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (5.07 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.07 mM); Clear solution				

### BIOLOGICAL ACTIVITY

Description	Ac-CoA Synthase Inhibitor1 is a potent, reversible acetate-dependent acetyl-CoA synthetase 2 (ACSS2) inhibitor with an IC <sub>50</sub> of 0.6 μM <sup>[1]</sup> . Ac-CoA Synthase Inhibitor1 inhibits the respiratory syncytial virus (RSV) <sup>[2]</sup> .
In Vitro	Ac-CoA Synthase Inhibitor1 inhibits cellular [ <sup>14</sup> C]acetate uptake into both lipids and histones with an IC <sub>50</sub> of 5 μM. Ac-CoA Synthase Inhibitor1 inhibits the ability of HepG2 cells to incorporate [ <sup>14</sup> C]acetate into lipids with IC <sub>50</sub> of 6.8 μM. Ac-CoA Synthase Inhibitor1 inhibits HepG2 utilization of [ <sup>14</sup> C]acetate for histone acetylation with IC <sub>50</sub> of 5.5 μM <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

- Sci Adv. 2023 Apr 14;9(15):eadf8522.
- Cell Death Dis. 2023 Nov 7;14(11):722.
- Liver Int. 2023 May 15.

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

## REFERENCES

[1]. Bill Severson, et al. Anti-viral treatment and assay to screen for anti-viral agent. WO 2011097607 A1

[2]. Sarah A Comerford, et al. Acetate dependence of tumors. Cell. 2014 Dec 18;159(7):1591-602.

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**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