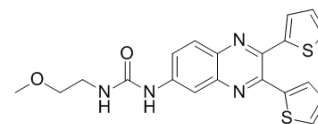


Ac-CoA Synthase Inhibitor1

Cat. No.:	HY-104032		
CAS No.:	508186-14-9		
Molecular Formula:	C ₂₀ H ₁₈ N ₄ O ₂ S ₂		
Molecular Weight:	410.51		
Target:	RSV		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



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	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.09 mM); Clear solution 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 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 ₅₀ of 0.6 μM ^[1] . Ac-CoA Synthase Inhibitor1 inhibits the respiratory syncytial virus (RSV) ^[2] .
In Vitro	Ac-CoA Synthase Inhibitor1 inhibits cellular [¹⁴ C]acetate uptake into both lipids and histones with an IC ₅₀ of 5 μM. Ac-CoA Synthase Inhibitor1 inhibits the ability of HepG2 cells to incorporate [¹⁴ C]acetate into lipids with IC ₅₀ of 6.8 μM. Ac-CoA Synthase Inhibitor1 inhibits HepG2 utilization of [¹⁴ C]acetate for histone acetylation with IC ₅₀ of 5.5 μM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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