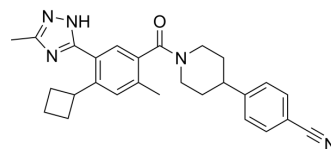


Denifanstat

Cat. No.:	HY-112829
CAS No.:	1399177-37-7
Molecular Formula:	C ₂₇ H ₂₉ N ₅ O
Molecular Weight:	439.55
Target:	Fatty Acid Synthase (FASN)
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, protect from light * In solvent : -80°C, 2 years; -20°C, 1 year (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (227.51 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	2.2751 mL	11.3753 mL	22.7505 mL
				5 mM	0.4550 mL	2.2751 mL	4.5501 mL
				10 mM	0.2275 mL	1.1375 mL	2.2751 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.69 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.69 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.69 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	Denifanstat (TVB-2640) is an orally active and potent Fatty Acid Synthase (FASN) inhibitor with an IC ₅₀ of 0.052 μM and an EC ₅₀ of 0.072 μM. Denifanstat has the potential for fatty liver disease and cancer research ^{[1][2]} .
IC ₅₀ & Target	IC ₅₀ : 0.052 μM (FASN) ^[1]
In Vitro	Denifanstat (compound 152) is a potent FASN inhibitor ^[2] . ?Fatty Acid Synthase (FASN) inhibition prevents palmitoylation of SARS-CoV2 spike protein ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Nat Metab. 2021 Sep 27;1-10.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Johan D., et al. Heterocyclic modulators of lipid synthesis. WO2012122391A1.

[2]. Minhyoung Lee, et al. Fatty Acid Synthase inhibition prevents palmitoylation of SARS-CoV2 Spike Protein and improves survival of mice infected with murine hepatitis virus. BioRxiv, December 21, 2020.

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

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