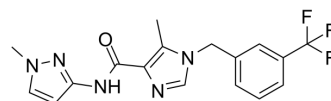


## SCD1 inhibitor-4

Cat. No.:	HY-141525		
CAS No.:	1295541-87-5		
Molecular Formula:	C <sub>17</sub> H <sub>16</sub> F <sub>3</sub> N <sub>5</sub> O		
Molecular Weight:	363.34		
Target:	Stearoyl-CoA Desaturase (SCD)		
Pathway:	Metabolic Enzyme/Protease		
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 : 100 mg/mL (275.22 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM		2.7522 mL	13.7612 mL	27.5224 mL
		5 mM		0.5504 mL	2.7522 mL	5.5045 mL
10 mM			0.2752 mL	1.3761 mL	2.7522 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 (6.88 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.88 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.88 mM); Clear solution					

### BIOLOGICAL ACTIVITY

Description	SCD1 inhibitor-4 is a potent, orally active stearoylCoA desaturase-1 (SCD1) inhibitor. SCD1 inhibitor-4 can be used for the research of diabetes <sup>[1]</sup> .
IC <sub>50</sub> & Target	SCD1 <sup>[1]</sup>
In Vivo	SCD1 inhibitor-4 (1~30 mg/kg) shows a dose-dependent decrease in desaturation index with a 55 % reduction at 1 mg/kg and 85% reduction at the 10 and 30 mg/kg doses <sup>[1]</sup> .

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MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Atkinson KA, et al. N-benzylimidazole carboxamides as potent, orally active stearylCoA desaturase-1 inhibitors. Bioorg Med Chem Lett. 2011;21(6):1621-1625.

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

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