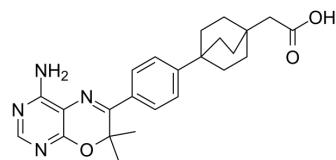


DGAT-1 inhibitor 2

Cat. No.:	HY-50670		
CAS No.:	942999-61-3		
Molecular Formula:	C ₂₄ H ₂₈ N ₄ O ₃		
Molecular Weight:	420.5		
Target:	Acyltransferase		
Pathway:	Metabolic Enzyme/Protease		
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 : 25 mg/mL (59.45 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.3781 mL	11.8906 mL	23.7812 mL
	5 mM	0.4756 mL	2.3781 mL	4.7562 mL
	10 mM	0.2378 mL	1.1891 mL	2.3781 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: 2.5 mg/mL (5.95 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (5.95 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (5.95 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

DGAT-1 inhibitor 2 is an effective inhibitor of DGAT-1; antiobesity agents. IC₅₀ value: Target: DGAT-1 Acyl-CoA: diacylglycerol acyltransferase 1 (DGAT1) is one of two known DGAT enzymes that catalyze the final step in triglyceride synthesis. Findings from genetically modified mice as well as pharmacological studies suggest that inhibition of DGAT1 is a promising strategy for the treatment of obesity and type 2 diabetes.

CUSTOMER VALIDATION

-
- J Dairy Sci. 2022 Feb 15;S0022-0302(22)00089-3.

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REFERENCES

- [1]. Matsuda D, Tomoda H. DGAT inhibitors for obesity. *Curr Opin Investig Drugs*. 2007 Oct;8(10):836-41.
- [2]. Birch, Alan M.; Birtles, Susan; Buckett, Linda K. et al. Discovery of a Potent, Selective, and Orally Efficacious Pyrimidinooxaziny Bicyclooctaneacetic Acid Diacylglycerol Acyltransferase-1 Inhibitor. *Journal of Medicinal Chemistry* (2009), 52(6), 1558-15
- [3]. King AJ, Judd AS, Souers AJ. Inhibitors of diacylglycerol acyltransferase: a review of 2008 patents. *Expert Opin Ther Pat*. 2010 Jan;20(1):19-29.
- [4]. Cao J, Zhou Y, Peng H et al. Targeting Acyl-CoA:diacylglycerol acyltransferase 1 (DGAT1) with small molecule inhibitors for the treatment of metabolic diseases. *J Biol Chem*. 2011 Dec 2;286(48):41838-51.
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Caution: Product has not been fully validated for medical applications. For research use only.

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