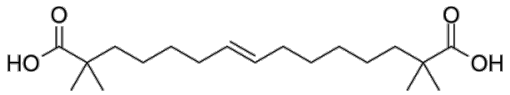
Product Data Sheet

Product Name: BGT-002
Cat. No.: GC79762

Chemical Properties

Cas. No.	2127387-94-2		
Formula	$C_{19}H_{34}O_4$	M.Wt	326.47
Solubility	DMSO: ≥ 100 mg/mL (306.31 mM)	Storage	Store at 4°C, protect from light
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			



Background

BGT-002 (326E) is an orally active dual ACLY inhibitor and PPARα agonist. BGT-002 reduces lipogenesis by inhibiting synthesis and promoting efflux. BGT-002 demonstrates efficacy in ameliorating metabolic dysfunction-associated steatohepatitis (MASH) and improving hyperlipidemia in vivo. BGT-002 can be used for hypercholesterolemia and MASH research [1] [2] [3].

In Vivo, BGT-002 (15, 30, and 60 mg/kg, p.o., daily for 9 weeks) ameliorates MASH in rodent models via dual targeting at ACLY and PPARα[1]. BGT-002 (20 mg/kg, p.o., daily for 18 weeks) ameliorates

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MASH and reverses fibrosis in cynomolgus monkeys[1]. BGT-002 (10, 30, and 100 mg/kg, p.o., single dose) significantly inhibits hepatic de novo lipogenesis in fasted-refed mice[2]. BGT-002 (30 mg/kg, p.o., single dose or daily for 7 days) increases cholesterol efflux and reduces hepatic cholesterol content in high cholesterol diet-induced mice[2]. BGT-002 (7.5, 15, 20, and 30 mg/kg, p.o., daily for 2 weeks) improves hyperlipidemia in diet-induced hyperlipidemic hamsters, and spontaneously hyperlipidemic rhesus monkeys[2]. BGT-002 (15, 30, and 60 mg/kg, p.o., daily for 24 weeks) improves atherosclerosis in Western diet (WD)-induced ApoE-/- mice[2].

In Vitro, BGT-002 (3-50 μmol/L, 4h) inhibits ACLY activity and suppresses lipid synthesis in primary hepatocytes isolated from mice by acting as a prodrug for its active ACLY-inhibiting CoA-thioester metabolite[2]. BGT-002 (12.5-50 μmol/L, 24 h) increases cholesterol efflux in the primary mouse hepatocytes by upregulating the ABCG5/8 transporters[2].

References:
[1]. Xie Z, et al. The enedioic acid analog 326E alleviates metabolic dysfunction-associated steatohepatitis via dual targeting at ACLY and PPARα. Cell Metab. 2025 Nov 4;37(11):2149-2166.e9.
[2]. Xie Z, et al. Development of the novel ACLY inhibitor 326E as a promising treatment for hypercholesterolemia. Acta Pharm Sin B. 2023 Feb;13(2):739-753.
[3]. Zhu X, et al. Simultaneous determination of BGT-002 and its acyl glucuronide metabolite ZM326E-M2 in human plasma by liquid chromatography-tandem mass spectrometry and its application to a pharmacokinetic study. J Pharm Biomed Anal. 2024 Jun 15;243:116056.

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