

Product Data Sheet

Product Name: BGT-002

Cat. No.: GC79762

Chemical Properties

Cas. No. 2127387-94-2

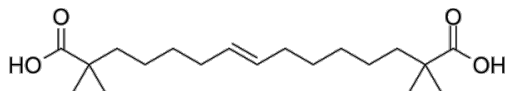
Formula $C_{19}H_{34}O_4$ M.Wt 326.47

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 PPAR α 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 PPAR α [1]. BGT-002 (20 mg/kg, p.o., daily for 18 weeks) ameliorates

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

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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 μ mol/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 μ mol/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 PPAR α . *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.

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