Data Sheet (Cat.No.T214376)

TargetMol

BGT-002

Chemical Properties

CAS No. : 2127387-94-2

Formula: C19H34O4

Molecular Weight: 326.48

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	BGT-002 (326E) is an orally active dual ACLY inhibitor and PPARα agonist. It reduces lipogenesis by inhibiting synthesis and promoting excretion. BGT-002 has demonstrated efficacy in vivo for improving metabolic dysfunction-associated steatohepatitis (MASH) and alleviating hyperlipidemia. It is applicable for research on hypercholesterolemia and MASH.
Targets(IC50)	ATP Citrate Lyase,PPAR
In vitro	BGT-002, when administered at concentrations of 3-50 μmol/L for 4 hours, acts as a prodrug of its active form, inhibiting ACLY and consequently reducing CoA-thioester metabolite synthesis and lipid synthesis in mouse primary hepatocytes. At concentrations of 12.5-50 μmol/L over 24 hours, BGT-002 enhances cholesterol efflux in mouse primary hepatocytes by upregulating the ABCG5/8 transport proteins.
In vivo	BGT-002, administered orally at doses of 15, 30, and 60 mg/kg once daily for 9 weeks, targets ACLY and PPARα to improve MASH in rodent models. At 20 mg/kg, taken orally once daily for 18 weeks, BGT-002 improves MASH and reverses fibrosis in crab-eating macaques. A single oral dose of BGT-002 at 10, 30, and 100 mg/kg significantly suppresses hepatic de novo lipogenesis in fasted-refed mice. When administered at 30 mg/kg either as a single dose or once daily for 7 consecutive days, it enhances cholesterol efflux and reduces hepatic cholesterol in mice on a high-cholesterol diet. Doses of 7.5, 15, 20, and 30 mg/kg, given orally once daily for 2 weeks, improve diet-induced hyperlipidemia in hamsters and spontaneous hyperlipidemia in rhesus monkeys. Lastly, BGT-002 at 15, 30, and 60 mg/kg, administered orally once daily for 24 weeks, ameliorates atherosclerosis in ApoE -/- mice induced by a Western diet (WD).

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.063 mL	15.3149 mL	30.6297 mL
5 mM	0.6126 mL	3.063 mL	6.1259 mL
10 mM	0.3063 mL	1.5315 mL	3.063 mL
50 mM	0.0613 mL	0.3063 mL	0.6126 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.