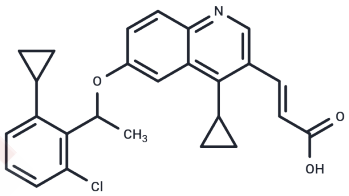
Data Sheet (Cat.No.T11348)

TargetMol

G907

Chemical Properties



CAS No. : 2244035-16-1

Formula: C26H24ClNO3

Molecular Weight: 433.93

Storage: Store at low temperature
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	G907 is a selective and potent antagonist of the small molecule ATP-binding cassette (ABC) transporter protein MsbA, with bactericidal activity, which traps MsbA in the inner lipopolysaccharide. G907 inhibits E. coli MsbA with an IC50 value of 18 nM.
Targets(IC50)	Antibacterial,Antibiotic
In vitro	G907 inhibits the activity of purified Escherichia coli MsbA with an IC50 value of 18 nM over a concentration range of 0.1 nM to 100 μM[1]. G907 exhibits allosteric inhibitory activity against MsbA[2]. At 100 nM, G907 completely inhibits the transport activity of biotin-PE in liposomes containing MsbA-WT protein[1].

Solubility Information

Solubility	DMSO: 60 mg/mL (138.27 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (5.76 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3045 mL	11.5226 mL	23.0452 mL
5 mM	0.4609 mL	2.3045 mL	4.609 mL
10 mM	0.2305 mL	1.1523 mL	2.3045 mL
50 mM	0.0461 mL	0.2305 mL	0.4609 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.

Reference

Guo D, et al. Energetics of lipid transport by the ABC transporter MsbA is lipid dependent. Commun Biol. 2021 Dec 9;4(1):1379.

Ho H, et al. Structural basis for dual-mode inhibition of the ABC transporter MsbA. Nature. 2018 May;557(7704): 196-201.