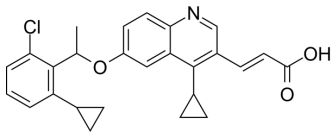
G907

Cat. No.:	HY-125176
CAS No.:	2244035-16-1
Molecular Formula:	$C_{26}H_{24}ClNO_3$
Molecular Weight:	433.93
Target:	Bacterial
Pathway:	Anti-infection

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 : 83.33 mg/mL (192.04 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.3045 mL	11.5226 mL	23.0452 mL
	5 mM	0.4609 mL	2.3045 mL	4.6090 mL
	10 mM	0.2305 mL	1.1523 mL	2.3045 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (4.79 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

G907 is a selective antagonist of ATP-binding cassette (ABC) transporter MsbA with anti-microbial activity. G907 inhibits E. coli MsbA with an IC_{50} value of 18 nM. G907 traps MsbA in an inward-facing, lipopolysaccharide-bound conformation by wedging into an architecturally conserved transmembrane pocket[1][2].

IC_{50} & Target

IC50: 18 nM (ABC transporter)[1]

In Vitro

G907 (0.1 nM-100 μM) inhibits the activity of purified E. coli MsbA in amphipols with an IC_{50} value of 18 nM[1].
G907 shows allosteric inhibition to MsbA[1].
G907 (100 nM) completely inhibits transport activity of biotin-PE in MsbA-WT-containing proteoliposomes[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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

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

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

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