**Proteins** 



## G907

Pathway:

Cat. No.: HY-125176 CAS No.: 2244035-16-1 Molecular Formula:  $C_{26}H_{24}CINO_3$ Molecular Weight: 433.93 Target: Bacterial

Storage: Powder -20°C 3 years 2 years

In solvent -80°C 2 years

Anti-infection

-20°C 1 year

**Product** Data Sheet

### **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<sub>50</sub> value of 18 nM. G907 traps MsbA in an inward-facing, lipopolysaccharide-bound conformation by wedging into an architecturally conserved transmembrane pocket<sup>[1][2]</sup>.

IC50: 18 nM (ABC transporter)<sup>[1]</sup> IC<sub>50</sub> & Target

> G907 (0.1 nM-100  $\mu$ M) inhibits the activity of purified E. coli MsbA in amphipols with an IC<sub>50</sub> value of 18 nM<sup>[1]</sup>. G907 shows allosteric inhibition to  $MsbA^{[1]}$ .

G907 (100 nM) completely inhibits transport activity of biotin-PE in MsbA-WT-containing proteoliposomes<sup>[2]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Page 1 of 2

In Vitro

1]. Guo D, et al. Energetics	s 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 b	pasis 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.
	Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
	Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

REFERENCES

Page 2 of 2 www.MedChemExpress.com