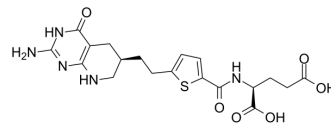


## LY309887

<b>Cat. No.:</b>	HY-10818		
<b>CAS No.:</b>	127228-54-0		
<b>Molecular Formula:</b>	C <sub>19</sub> H <sub>23</sub> N <sub>5</sub> O <sub>6</sub> S		
<b>Molecular Weight:</b>	449.48		
<b>Target:</b>	Antifolate		
<b>Pathway:</b>	Cell Cycle/DNA Damage		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (222.48 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.2248 mL	11.1240 mL	22.2479 mL
	5 mM	0.4450 mL	2.2248 mL	4.4496 mL
	10 mM	0.2225 mL	1.1124 mL	2.2248 mL

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

### BIOLOGICAL ACTIVITY

#### Description

LY309887 is a potent inhibitor of glycinamide ribonucleotide formyltransferase (GARFT), with a K<sub>i</sub> of 6.5 nM, and has antitumor activity.

#### IC<sub>50</sub> & Target

Ki: 6.5 nM (GARFT), 1.78 nM (Folate receptor α), 18.2 nM (Folate receptor β)<sup>[1]</sup>

#### In Vitro

LY309887 is a potent inhibitor of glycinamide ribonucleotide formyltransferase (GARFT), with a K<sub>i</sub> of 6.5 nM for human GARFT and also has high affinity at human folate receptor (FR)α and FRβ (K<sub>i</sub>, 1.78 nM and 18.2 nM, respectively). LY309887 is significantly cytotoxic against the human leukemia cell line CCRF-CEM with IC<sub>50</sub> of 9.9 nM<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

LY309887 (3 mg/kg-100 mg/kg, i.p.) shows complete inhibition on the tumor growth in mice bearing C3H mammary cancer cells<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Mendelsohn LG, et al. Biochemistry and pharmacology of glycinamide ribonucleotide formyltransferase inhibitors: LY309887 and lometrexol. Invest New Drugs. 1996;14(3):287-94.

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**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](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA