Metallo β-lactamase ligand 1

Cat. No.: HY-136306

CAS No.: 1087784-71-1

Molecular Formula: $C_7H_9NO_5S$

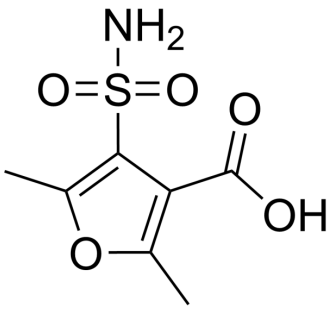
Molecular Weight: 219.22

Target: Bacterial; Beta-lactamase

Pathway: Anti-infection

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (1140.41 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.5616 mL	22.8081 mL	45.6163 mL
	5 mM	0.9123 mL	4.5616 mL	9.1233 mL
	10 mM	0.4562 mL	2.2808 mL	4.5616 mL

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

BIOLOGICAL ACTIVITY

Description

Metallo-beta-lactamase ligand 1 is a class B β-lactamase inhibitor with antibacterial activity extracted from patent WO2019221122A1, compound A[1].

In Vitro

One effective measure against β-lactam antibacterial resistant bacteria is to use an inhibitor of β-lactamase, the enzyme responsible for its resistance mechanism, together with an appropriate β-lactam antibacterial agent[1].

The toxicity of Metallo-beta-lactamase ligand 1 (Compound A) is extremely low in HeLa cells[1].

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

In Vivo

After infecting mice with an experimental strain (E. coli strain into which a plasmid encoding class B β-lactamase (IMP-1) is introduced), Metallo-beta-lactamase ligand 1 (compound A; 100 mg/kg; intraperitoneal injection) is administered, and life and death are observed. Administration of Metallo-beta-lactamase ligand 1 (compound A) significantly improves the survival rate[1].

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

REFERENCES

[1]. Arakawa, Yoshichika, et al.β-LACTAMASE INHIBITOR. WO2019221122A1.

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

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