FPI-1523 sodium

Cat. No.: HY-139745

CAS No.: 1452459-52-7

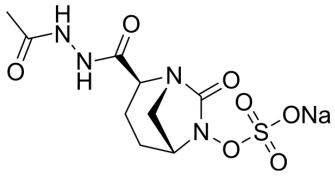
Molecular Formula: $C_9H_{13}N_4NaO_7S$

Molecular Weight: 344.28

Target: Bacterial; Beta-lactamase

Pathway: Anti-infection

Storage: 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H_2O : 125 mg/mL (363.08 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.9046 mL	14.5231 mL	29.0461 mL
	5 mM	0.5809 mL	2.9046 mL	5.8092 mL
	10 mM	0.2905 mL	1.4523 mL	2.9046 mL

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

BIOLOGICAL ACTIVITY

Description

FPI-1523 sodium, a derivative of Avibactam, is a potent β-lactamase inhibitor, with K_ds of 4 nM and 34 nM for CTX-M-15 and OXA-48, respectively. FPI-1523 sodium also inhibits PBP2, with an IC_{50} of 3.2 μM. FPI-1523 sodium exhibits considerable antimicrobial activity[1].

IC_{50} & Target

β-lactamase[1]

In Vitro

FPI-1523 sodium inhibits K12 E. coli K12 and PBP2, with MIC and IC_{50} of 4 μg/mL and 0.4 μg/mL, respectively[1].
FPI-1523 sodium inhibit E. coli BW25113 pGDP-2 transformants either with an empty vector or expressing different β-lactamases, with low MICs (1-2 μM)[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. King AM, et, al. Structural and Kinetic Characterization of Diazabicyclooctanes as Dual Inhibitors of Both Serine-β-Lactamases and Penicillin-Binding Proteins. ACS Chem Biol. 2016 Apr 15;11(4):864-8.

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