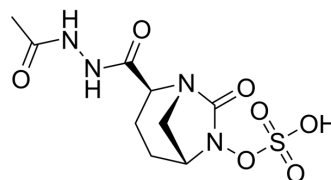


## FPI-1523

Cat. No.:	HY-139745A
CAS No.:	1452459-50-5
Molecular Formula:	C <sub>9</sub> H <sub>14</sub> N <sub>4</sub> O <sub>7</sub> S
Molecular Weight:	322.3
Target:	Bacterial; Beta-lactamase
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	FPI-1523, a derivative of Avibactam, is a potent $\beta$ -lactamase inhibitor, with $K_{d}$ s of 4 nM and 34 nM for CTX-M-15 and OXA-48, respectively. FPI-1523 also inhibits PBP2, with an $IC_{50}$ of 3.2 $\mu$ M. FPI-1523 exhibits considerable antimicrobial activity <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	$\beta$ -lactamase <sup>[1]</sup>
<b>In Vitro</b>	FPI-1523 inhibits K12 E. coli K12 and PBP2, with MIC and $IC_{50}$ of 4 $\mu$ g/mL and 0.4 $\mu$ g/mL, respectively <sup>[1]</sup> . FPI-1523 inhibit E. coli BW25113 pGDP-2 transformants either with an empty vector or expressing different $\beta$ -lactamases, with low MICs (1-2 $\mu$ M) <sup>[1]</sup> . 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- $\beta$ -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.**

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