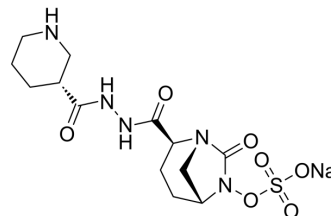


## Zidebactam sodium salt

<b>Cat. No.:</b>	HY-120859A
<b>CAS No.:</b>	1706777-46-9
<b>Molecular Formula:</b>	C <sub>13</sub> H <sub>20</sub> N <sub>5</sub> NaO <sub>7</sub> S
<b>Molecular Weight:</b>	413.38
<b>Target:</b>	Bacterial; Beta-lactamase; Penicillin-binding protein (PBP)
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Zidebactam sodium salt (WCK-5107 sodium salt) is a potent $\beta$ -lactamase inhibitor <sup>[1]</sup> . Zidebactam also is a penicillin-binding protein2 (PBP2) inhibitor with an IC <sub>50</sub> of 0.26 $\mu$ g/mL <sup>[2]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 0.26 $\pm$ 0.06 $\mu$ g/mL (P. aeruginosa PAO1 PBP2) <sup>[2]</sup> .
<b>In Vitro</b>	Zidebactam sodium salt (WCK-5107 sodium salt) inhibits WT Enterobacteriaceae with a MIC <sub>50</sub> of 0.25 mg/L <sup>[1]</sup> . Zidebactam sodium salt (WCK-5107 sodium salt) alone exhibits variable activity when tested against E. coli (MIC <sub>50/90</sub> 0.12/0.12 mg/L) and Enterobacter spp. (MIC <sub>50/90</sub> 0.12/0.25 mg/L) <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

- J Antimicrob Chemother. 2023 Mar 15;dkad061.
- Antimicrob Agents Chemother. 2023 May 31;e0033923.
- Antimicrob Agents Chemother. 2021 Nov 22;AAC0167621.
- Antibiotics (Basel). 2021, 10(11), 1341.
- Microbiol Spectr. 2022 Feb 23;10(1):e0267821.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

### REFERENCES

[1]. Sader HS, et al. WCK 5222 (cefepime/zidebactam) antimicrobial activity tested against Gram-negative organisms producing clinically relevant  $\beta$ -lactamases. J Antimicrob Chemother. 2017 Jun 1;72(6):1696-1703.

[2]. Moya B, et al. WCK 5107 (Zidebactam) and WCK 5153 Are Novel Inhibitors of PBP2 Showing Potent " $\beta$ -Lactam Enhancer" Activity against Pseudomonas aeruginosa, Including Multidrug-Resistant Metallo- $\beta$ -Lactamase-Producing High-Risk Clones. Antimicrob Agents Chemother. 2017 May 24;61(6).

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

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