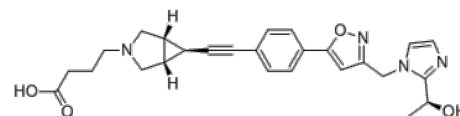


**Product Name** : TP0586532  
**Cat. No.** : PC-38175  
**CAS No.** : 2427584-96-9  
**Molecular Formula** : C<sub>26</sub>H<sub>28</sub>N<sub>4</sub>O<sub>4</sub>  
**Molecular Weight** : 460.534  
**Target** : Bacterial  
**Solubility** :



## Biological Activity

TP0586532 (TP 0586532) is a novel non-hydroxamate inhibitor of UDP-3-O-acyl-N-acetylglucosamine deacetylase (LpxC) with IC<sub>50</sub> of 0.101 uM, shows MIC values 2 mg/mL and 4 mg/mL for E. coli ATCC 25922 and K. pneumoniae ATCC 13883; TP0586532 is effective against carbapenem-resistant Klebsiella pneumoniae and does not pose a cardiovascular risk. The MIC<sub>90</sub> of TP0586532 against clinical isolates of carbapenem-resistant Klebsiella pneumoniae was 4 ug/mL. TP0586532 also showed an in vivo efficacy against murine systemic, urinary tract and lung infection models caused by meropenem- or ciprofloxacin-resistant strains. TP0586532 also reduces LPS release and IL-6 production both in vitro and in vivo.

## References

- Ushiyama F, et al. Bioorg Med Chem. 2021 Jan 15;30:115964.  
Fujita K, et al. J Antibiot (Tokyo). 2022 Feb;75(2):98-107.  
Fujita K, et al. J Antibiot (Tokyo). 2022 Mar;75(3):136-145.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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