

Data Sheet

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 TP0586532

 Cat. No.
 :
 PC-38175

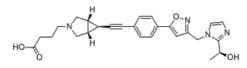
 CAS No.
 :
 2427584-96-9

 Molecular Formula
 :
 C₂₆H₂₈N₄O₄

 Molecular Weight
 :
 460.534

 Target
 :
 Bacterial

Solubility : 10 mM in DMSO



Biological Activity

TP0586532 (TP 0586532) is a novel non-hydroxamate inhibitor of UDP-3-O-acyl-N-acetylglucosamine deacetylase (**LpxC**) with IC50 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 MIC90 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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