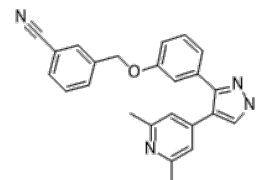


Product Name : Lolamicin
Cat. No. : PC-22468
CAS No. : 2930690-12-1
Molecular Formula : C₂₄H₂₀N₄O
Molecular Weight : 380.45
Target : Bacterial
Solubility : 10 mM in DMSO



CAS: 2930690-12-1

Biological Activity

Lolamicin is a Gram-negative-specific antibiotic targeting the lipoprotein transport system **LoiCDE** complex, shows potent activity in against Gram-negative pathogens, sparing the gut microbiome.

Lolamicin has marked activity in laboratory strains of Gram-negative pathogens including *E. coli* (*E. coli* Δ*toIC JW5503*, MIC=0.008 ug/mL), *Klebsiella pneumoniae* and *Enterobacter cloacae*, but not in the wild-type or efflux-deficient strains of *Pseudomonas aeruginosa* or *Acinetobacter baumannii*.

Lolamicin also exhibited minimal toxicity towards mammalian cell lines and red blood cells. shows no killing of commensal gut bacteria in culture and causes no significant changes to the mouse gut microbiome.

Lolamicin shows efficacy in multiple mouse models of acute pneumonia and septicemia infection, and spares the gut microbiome in mice, preventing secondary infection with *Clostridioides difficile*.

References

Muñoz KA, et al. *Nature*. 2024 Jun;630(8016):429-436.

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

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