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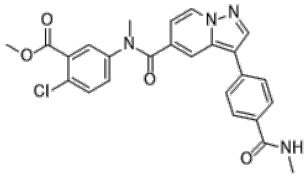
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	EDI048
Cat. No.	:	PC-23131
CAS No.	:	2767264-57-1
Molecular Formula	:	$C_{25}H_{21}ClN_4O_4$
Molecular Weight	:	476.92
Target	:	Parasite
Solubility	:	10 mM in DMSO



CAS: 2767264-57-1

Biological Activity

EDI048 (EDI-048) is a specific, ATP-competitive, gastrointestinal-targeted Cryptosporidium PI(4)K (**CpPI(4)K**) inhibitor with IC50 of 4 nM, >300-fold with human orthologue HsPI(4)K, demonstrates in vitro anti-Cryptosporidium activity (Cp CPE, EC50=52 nM).
EDI048 is a potent CpPI(4)K inhibitor (IC50 = 5.2 nM) with anti-parasitic activity against both C. parvum and C. hominis, is active on Cryptosporidium in the gastrointestinal epithelium in the mouse model.
EDI048 demonstrated dose-dependent efficacy with a 0.3, 1.1 and 3.1 log reduction in oocyst shedding at 1, 3 and 10 mg kg−1 doses, respectively.
EDI048 is a soft drug in all tested preclinical species and had no human-specific metabolites, warranting further safety and efficacy profiling.
EDI048 blocks membrane biogenesis, preventing the formation of functional merozoites.

References

Manjunatha UH, et al. ***Nat Microbiol.*** 2024 Oct 8. doi: 10.1038/s41564-024-01810-x.

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