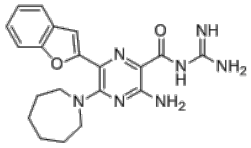
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Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	BB2-50F
Cat. No.	:	PC-21654
CAS No.	:	2226086-65-1
Molecular Formula	:	$C_{20}H_{23}N_7O_2$
Molecular Weight	:	393.45
Target	:	Bacterial
Solubility	:	10 mM in DMSO



CAS: 2226086-65-1

Biological Activity

BB2-50F is a bactericidal inhibitor of **M. tuberculosis** with MIC value of 8 uM (H37Rv), inhibits **succinate dehydrogenase** (SDH) and the **F1Fo-ATP synthase**.
BB2-50F inhibits the growth of M. tuberculosis H37Rv and the BSL2 approved H37Rv auxotrophic-attenuated derivative mc2 6230 (ΔRD1, ΔpanCD) with MIC of 8 uM.
BB2-50F inhibits the growth of a panel of 22 M tuberculosis mc2 6206 (ΔleuD, ΔpanCD) mono-resistant mutants isolated against a variety of TB drugs including isoniazid (INH), rifampicin (RIF), BDQ, and PA-824 with a similar MIC as wild-type (WT).
BB2-50F (10X MIC) kills replicating cultures of M. tuberculosis mc2 6230 more rapidly than the current TB drugs BDQ, INH, and RIF.
BB2-50F potentiates the killing of M. tuberculosis by first- and second-line TB antibiotics.
BB2-50F inhibits mycobacterial succinate oxidation, dysregulates the TCA cycle and secretion of TCA cycle metabolites to prevent their intracellular toxicity.

References

Cara Adolph, et al. ***Cell Chem Biol***. 2023 Dec 21:S2451-9456(23)00432-4.

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

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