Product Data Sheet



Mtb-IN-4

Cat. No.: HY-155720 CAS No.: 2306039-13-2 Molecular Formula: $C_{24}H_{18}N_2O_4S$ Molecular Weight: 430.48

Target: Bacterial Pathway: Anti-infection

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Mtb-IN-4 (compound 17h) is a nontoxic isoxazole, with anti-Mycobacterium tuberculosis (Mtb) activity (IC $_{50}$ =0.70 μ M). Mtb-IN-4 inhibits Mtb respiration and biofilm formation in macrophage, and enhances antibiotic isoniazid (INH) inhibition against INH-resistant Mtb mutant ^[1] .
IC ₅₀ & Target	Mycobacterium tuberculosis (Mtb) $^{[1]}$
In Vitro	Mtb-IN-4 potently resensitizes an Mtb katG mutant to inhibition by INH ^[1] . Mtb-IN-4 inhibits the growth of intracellular Mtb within murine RAW 264.7 macrophages with IC ₅₀ of 3.467 μ M ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Sarkar S, et al. Design, Synthesis, and Evaluation of Novel Δ2-Thiazolino 2-Pyridone Derivatives That Potentiate Isoniazid Activity in an Isoniazid-Resistant Mycobacterium tuberculosis Mutant. J Med Chem. 2023 Aug 24;66(16):11056-11077.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA