Product Data Sheet

MurA-IN-3

Cat. No.: HY-151875 CAS No.: 2866186-38-9

Molecular Formula: $C_{27}H_{23}ClN_2O_5S$

Molecular Weight: 523

Target: Bacterial Pathway: Anti-infection

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

Analysis.

BIOLOGICAL ACTIVITY

Description	MurA-IN-3 is a reversible pyrrolidinedione-based MurA inhibitor. MurA-IN-3 has inhibitory activity for MurA with an IC $_{50}$ value of 4.5 μ M. MurA-IN-3 also has antibacterial activity ^[1] .
IC ₅₀ & Target	IC50: 4.5 μM (MurA); 4.9 μM (C115D MurA mutant) ^[1] .
In Vitro	MurA-IN-3 has inhibitory activity for MurA and C115D MurA mutant with IC $_{50}$ values of 4.5 μ M and 4.9 μ M, respectively [1]. MurA-IN-3 (0-100 μ M; 24 h) has no cytotoxicity on both MRC-5 and HepG2 cell lines [1]. MurA-IN-3 has antibacterial activity and pronounced stability [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Reem K Fathalla, et al. Identification and Biochemical Characterization of Pyrrolidinediones as Novel Inhibitors of the Bacterial Enzyme MurA. J Med Chem. 2022 Nov 10;65(21):14740-14763.

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

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