Product Data Sheet

Antimycobacterial agent-4

Cat. No.: HY-148180 CAS No.: 476319-66-1 Molecular Formula: $C_{15}H_{10}N_4O_3S$ Molecular Weight: 326.33

Target: Bacterial; Parasite

Pathway: Anti-infection

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)

BIOLOGICAL ACTIVITY

Description	Antimycobacterial agent-4 is a 2-amino-4-(2-pyridyl) thiazole derivative, with antimycobacterial activity, antiplasmodial activity, and cytotoxicity on a mammalian cell line $^{[1][2]}$.
IC ₅₀ & Target	Plasmodium
In Vitro	Antimycobacterial agent-4 (compound 12) exerts antimycobacterial activity against the Mycobacterium tuberculosis H37Rv strain (MIC $_{99}$ =5 μ M), and antiplasmodial activity against the Chloroquine (HY-17589A) sensitive NF54 Plasmodium falciparum strain (IC $_{50}$ =6.1 μ M) and cytotoxicity on a mammalian cell line (CHO, IC $_{50}$ =2.2 μ M) ^[1] . Antimycobacterial agent-4 (compound 38) shows cytotoxicity against Vero cells with toxic concentration TC $_{50}$ of 3.0 μ M ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Mjambili F, et al. Synthesis and biological evaluation of 2-aminothiazole derivatives as antimycobacterial and antiplasmodial agents. Bioorg Med Chem Lett. 2014 Jan 15;24(2):560-4.

[2]. Kesicki EA, et al. Synthesis and Evaluation of the 2-Aminothiazoles as Anti-Tubercular Agents. PLoS One. 2016 May 12;11(5):e0155209.

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

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