Product Data Sheet

Antileishmanial agent-22

Molecular Weight: 549.45

Target: Parasite; Bacterial
Pathway: Anti-infection

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

Analysis.

BIOLOGICAL ACTIVITY

Description	Antileishmanial agent-22 (compound 15b) is a parasite inhibitor and an antibacterial agent, with antileishmanial, antimalarial, and anti-tubercular activities. Antileishmanial agent-22 inhibits leishmanial (IC_{50} =0.408 μ M) based on antifolate mechanism. And, Antileishmanial agent-22 inhibits Folic acid and Folinic acid at 100 μ M with inhibitory rates of 88% and 94%, respectively. Antileishmanial agent-22 inhibits P. berghei in vivo and in vitro, with 96.67% suppression under 48.4 μ M/kg/day and 0.038 μ M (IC_{50}), respectively. Moreover, Antileishmanial agent-22 inhibits M. tuberculosis with MIC of 28.44 μ M ^[1] .
IC ₅₀ & Target	IC50: 0.408 μ M (leishmanial), 0.038 μ M (P. berghei); MIC: 28.44 μ M (M. tuberculosis) $^{[1]}$
In Vivo	Antileishmanial agent-22 (compound 15b) MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ibrahim TM, et al. Tetrahydrobenzo[h]quinoline derivatives as a novel chemotype for dual antileishmanial-antimalarial activity graced with antitubercular activity: Design, synthesis and biological evaluation. Eur J Med Chem. 2023 Sep 5;257:115534.

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

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