Product Data Sheet

Stilbamidine

Cat. No.: HY-U00007

CAS No.: 122-06-5 Molecular Formula: $C_{16}H_{16}N_4$ Molecular Weight: 264.33

Target: Fungal

Pathway: Anti-infection

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

Analysis.

BIOLOGICAL ACTIVITY

Description	Stilbamidine is a diamidine compound derived from Stilbene and used chiefly in the form of its crystalline isethionate salt in treating various fungal infections.
IC ₅₀ & Target	fungal
In Vitro	The high-affinity pentamidine transporter (HAPT1) is inhibited by Propamidine but displays only low affinity to Stilbamidine. adenosine-sensitive pentamidine transporter (ASPT1), in contrast, is strongly inhibited by Stilbamidine, and Propamidine. [3 H]pentamidine uptake is determined in the presence of various concentrations of adenosine (IC $_{50}$ =1.2 μ M) or melarsen oxide (IC $_{50}$ =0.7 μ M), as well as in the presence of 250 μ M adenosine and increasing concentrations of hypoxanthine, Propamidine (IC $_{50}$ =6.1 μ M) and Stilbamidine (IC $_{50}$ =110 μ M) $^{[1]}$. The two diamidine compounds, Stilbamidine and Pentamidine are used to treat in multiple myeloma, a disease in which increase of the globulin content of the serum is of frequent occurrence [$^{[2]}$].

REFERENCES

[1]. De Koning HP. Uptake of pentamidine in Trypanosoma brucei brucei is mediated by three distinct transporters: implications for cross-resistance with arsenicals. Mol Pharmacol. 2001 Mar;59(3):586-92.

[2]. BREWER AE.et al. Multiple myeloma treated with stilbamidine and pentamidine. Br Med J. 1948 Dec 4;2(4587):978-82.

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

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