Product Information



Trimidox (hydrochloride)

Item No. 10011124

CAS Registry No.: 95933-75-8

Formal Name: N,3,4,5-tetrahydroxy-

benzenecarboximidamide,

monohydrochloride

Synonym: VF 233 (hydrochloride)

C₇H₈N₂O₄ • HCl FW: 220.6 **Purity:** ≥98%

Stability: ≥2 years at -20°C Supplied as: A crystalline solid λ_{max} : 220, 280 nm UV/Vis.:

Laboratory Procedures

For long term storage, we suggest that trimidox be stored as supplied at -20°C. It will be stable for at least two years.

Trimidox is supplied as a crystalline solid. A stock solution may be made by dissolving the trimidox in an organic solvent purged with an inert gas. Trimidox is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of trimidox in these solvents is approximately 20 mg/ml.

Trimidox is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, trimidox should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Trimidox has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Ribonucleotide reductase, the rate-limiting enzyme for de novo DNA synthesis, is a common target for chemotherapy. Its increased activity in cancer cells is associated with malignant transformation and proliferation. Trimidox is a specific ribonucleotide reductase inhibitor that reduces levels of dGTP and dCTP in HL-60 cells, inducing apoptosis via activation of caspases without altering the cell cycle distribution.^{1,2} Trimidox inhibits growth of human promyelocytic leukemia HL-60 cells with an IC₅₀ value of 35 μ M.¹

References

- 1. Szekeres, T., Fritizer, M., Strobl, H., et al. Synergistic growth inhibitory and differentiating effects of trimidox and tiazofurin in human promyelocytic leukemia HL-60 cells. Blood 84(12), 4316-4321 (1994).
- Kanno, S.-I., Uwai, K., Tomizawa, A., et al. Trimidox induces apoptosis via cytochrome c release in NALM-6 human B cell leukaemia cells. Basic & Clinical Pharmacology & Toxicology 98, 44-50 (2006).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10011124

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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