

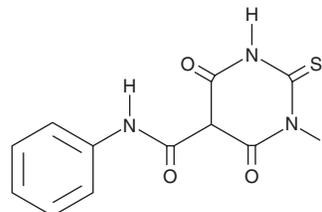
PRODUCT INFORMATION



Merbarone

Item No. 43165

CAS Registry No.: 97534-21-9
Formal Name: hexahydro-4,6-dioxo-N-phenyl-2-thioxo-5-pyrimidinecarboxamide
Synonyms: NSC 336628, RLBN 1001
MF: C₁₁H₉N₃O₃S
FW: 263.3
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Merbarone is supplied as a solid. A stock solution may be made by dissolving the merbarone in the solvent of choice, which should be purged with an inert gas. Merbarone is sparingly soluble (1-10 mg/ml) in DMSO.

Description

Merbarone is an inhibitor of topoisomerase II (IC₅₀ = 20 μM) and xanthine oxidoreductase (IC₅₀ = 51 μM).^{1,2} It is selective for topoisomerase II over topoisomerase I (IC₅₀ = ~200 μM).¹ Merbarone increases lifespan in a variety of murine cancer models, including B16 melanoma, L1210 leukemia, P388 leukemia, and M5076 sarcoma models.³

References

1. Drake, F.H., Hofmann, G.A., Mong, S.M., *et al.* In vitro and intracellular inhibition of topoisomerase II by the antitumor agent merbarone. *Cancer Res.* **49**(10), 2578-2583 (1989).
2. Muindi, J.F., Stevens, Y.-W., Warrell, R.P., Jr., *et al.* In vitro differential metabolism of merbarone by xanthine oxidase and microsomal flavoenzymes. The role of reactive oxygen species. *Drug Metab. Dispos.* **21**(3), 410-414 (1993).
3. Glover, A., Chun, H.G., Kleinman, L.M., *et al.* Merbarone: An antitumor agent entering clinical trials. *Invest. New Drugs* **5**(2), 137-143 (1987).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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