

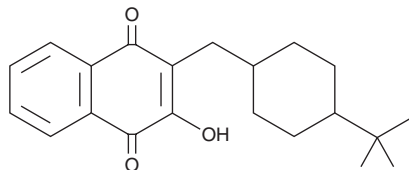
PRODUCT INFORMATION



Buparvaquone

Item No. 21704

CAS Registry No.: 88426-33-9
Formal Name: 2-[[4-(1,1-dimethylethyl)cyclohexyl]methyl]-3-hydroxy-1,4-naphthalenedione
Synonym: BW 720C
MF: C₂₁H₂₆O₃
FW: 326.4
Purity: ≥98%
UV/Vis.: λ_{max}: 252, 282, 332 nm
Supplied as: A crystalline 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

Buparvaquone is supplied as a crystalline solid. A stock solution may be made by dissolving the buparvaquone in the solvent of choice. Buparvaquone is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of buparvaquone in DMSO and DMF is approximately 1 mg/ml. Buparvaquone is also sparingly soluble in ethanol.

Buparvaquone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, buparvaquone should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Buparvaquone has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Buparvaquone is a hydroxynaphthoquinone that inhibits electron transport by blocking cytochrome *bc*₁ in parasites that cause leishmaniasis.¹ Formulations containing buparvaquone are used to treat theileriosis, an infection by the parasites *T. annulata* and *T. parva* (*in vitro* EC₅₀s of 1.5 x 10⁻⁸ M and 6.1 x 10⁻¹⁰ M, respectively).^{2,3}

References

1. Ortiz, D., Forquer, I., Boitz, J., *et al.* Targeting the cytochrome *bc*₁ complex of Leishmania parasites for discovery of novel drugs. *Antimicrob. Agents Chemother.* **60(8)**, 4972-4982 (2016).
2. Abdou, T.A., Abou-El-naga, T.R., and Mahmoud, M.A. Clinicopathological studies on *Theileria annulata* infection in Siwa oasis in Egypt, (2005), 70 in 56th Annual Meeting of the European Association for Animal Production.
3. Hudson, A.T., Randall, A.W., Fry, M., *et al.* Novel anti-malarial hydroxynaphthoquinones with potent broad spectrum anti-protozoal activity. *Parasitology* **90(Pt 1)**, 45-55 (1985).

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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