

Product Data Sheet

Product Name: Thymohydroquinone

Cat. No.: GC45578

Chemical Properties

Cas. No. 2217-60-9

SMILES CC(C)C1=C(O)C=C(C)C(O)=C1

Formula C₁₀H₁₄O₂

M.Wt 166.2

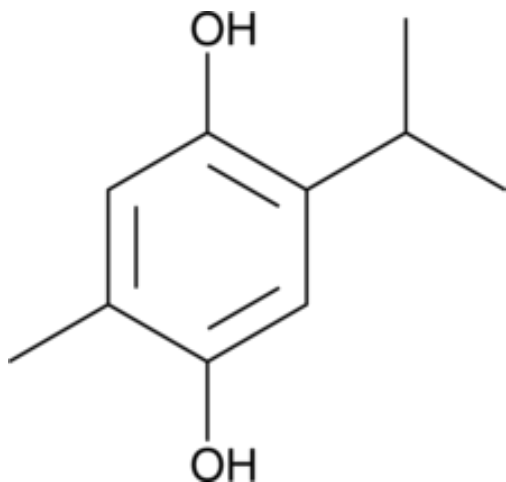
Solubility DMF: 1 mg/mL, DMSO: 1 mg/mL, Ethanol: 2 mg/mL, Ethanol: PBS (pH 7.2) (1:9): 0.1 mg/mL

Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Thymohydroquinone is a quinone that has been found in *N. sativa* seeds and has diverse biological activities.^{1,2} It scavenges 2,2-diphenyl-1-picrylhydrazyl free radicals in a cell-free assay (IC₅₀ = 2.4 µg/ml) and has a Trolox equivalent value of 2.6 in an oxygen radical absorbance capacity (ORAC) assay when used at concentrations ranging from 1.6 to 6.4 µg/ml.¹ Thymohydroquinone inhibits

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

growth of A2780, OVCAR-8, and CIS-A2780 ovarian cancer cells (IC₅₀s = 3.1, 8.9, and 9.8 μ M, respectively), as well as immortalized human ovarian epithelial cells (IC₅₀ = 14 μ M).² It is also active against *P. falciparum* in vitro (IC₅₀ = 15.9 μ M).

References

1. Tesarova, H., Svobodova, B., Kokoska, L., et al. Determination of oxygen radical absorbance capacity of black cumin (*Nigella sativa*) seed quinone compounds. *Nat. Prod. Commun.* 6(2), 213-216 (2011).
2. Johnson-Ajinwo, O.R., Ullah, I., Mbye, H., et al. The synthesis and evaluation of thymoquinone analogues as anti-ovarian cancer and antimalarial agents. *Bioorg. Med. Chem. Lett.* 28(7), 1219-1222 (2018).

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA