

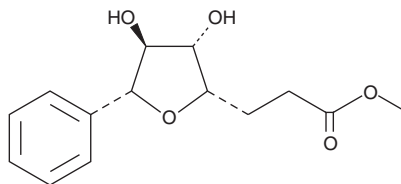
Product Information



(+)-Goniothalesdiol

Catalog No. 10008886

CAS Registry No.: 204975-45-1
Formal Name: 4,7-anhydro-2,3-dideoxy-7R-C-phenyl-D-xylo-heptonic acid, methyl ester
MF: C₁₄H₁₈O₅
FW: 266.7
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in methyl acetate



Laboratory Procedures

For long term storage, we suggest that (+)-goniothalesdiol be stored as supplied at -20°C. It should be stable for at least one year.

(+)-Goniothalesdiol is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol and dimethyl formamide purged with an inert gas can be used. The solubility of (+)-goniothalesdiol in these solvents is approximately 30 and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of (+)-goniothalesdiol is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of (+)-goniothalesdiol in PBS, pH 7.2, is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

(+)-Goniothalesdiol, isolated from the bark of the Malaysian tree *G. borneensis*, is a tetrahydrofuran compound known to have significant cytotoxic effects against P388 murine leukemia cells and pesticidal activities.^{1,2} It has been shown to have promising cytotoxic activity against p388 murine leukemia cells (ED₅₀ ≥30 µg/ml).^{3,4}

References

1. Prasad, K.R. and Gholap, S.L. An expeditious enantiospecific total synthesis of (+)-7-*epi*-goniofufurone. *Synlett* **14**, 2260-2262 (2005).
2. Blázquez, M.A., Bermejo, A., Zafra-Polo, M.C., *et al.* Styryl-lactones from *Goniothalamus* species-a review. *Phytochem. Anal.* **10**, 161-170 (1999).
3. Prasad, K.R. and Gholap, S.L. Stereoselective synthesis of (+)-goniothalesdiol. *J. Org. Chem.* **71**, 3643-3645 (2006).
4. Cao, S.-G., Wu, X.-H., Sim, K.-Y., *et al.* Styryl-lactone derivatives and alkaloids from *goniothalamus borneensis* (annonaceae). *Tetrahedron* **54**, 2143-2148 (1998).

Related Product

(+)-2,5-*epi*-Goniothalesdiol - Cat. No. 10008887

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

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 Material Safety Data Sheet, which has been sent *via* email to your institution.

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