

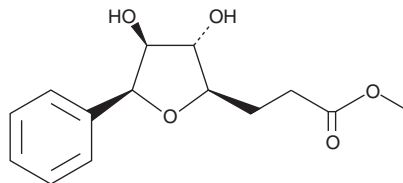
# PRODUCT INFORMATION



## (+)-2,5-*epi*-Goniothalesdiol

Item No. 10008887

**CAS Registry No.:** 887927-59-5  
**Formal Name:** methyl 3-(3S,4S-dihydroxy-5S-phenyltetrahydrofuran-2R-yl)propanoate  
**MF:** C<sub>14</sub>H<sub>18</sub>O<sub>5</sub>  
**FW:** 266.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 206 nm  
**Supplied as:** A solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥1 year



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

### Laboratory Procedures

(+)-2,5-*epi*-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, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. (+)-2,5-*epi*-Goniothalesdiol is miscible in ethanol and has a solubility of approximately 20 mg/ml in DMSO and DMF.

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 (+)-2,5-*epi*-goniothalesdiol is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of (+)-2,5-*epi*-goniothalesdiol in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

(+)-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.<sup>1,2</sup> (+)-2,5-*epi*-Goniothalesdiol is a goniothalesdiol analog.<sup>3</sup> Little is known of its biological activity.

### 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).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM