

# PRODUCT INFORMATION



## 4'-Demethylpodophyllotoxin

Item No. 36481

**CAS Registry No.:** 40505-27-9  
**Formal Name:** (5R,5aR,8aR,9R)-5,8,8a,9-tetrahydro-9-hydroxy-5-(4-hydroxy-3,5-dimethoxyphenyl)-furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one

**MF:** C<sub>21</sub>H<sub>20</sub>O<sub>8</sub>

**FW:** 400.4

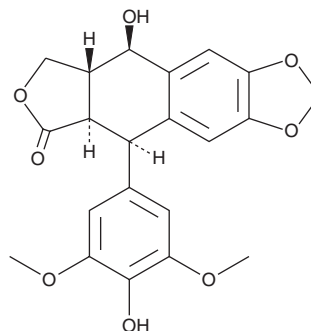
**Purity:** ≥98%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years

**Item Origin:** Plant/*Dysosma versipellis*



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

### Laboratory Procedures

4'-Demethylpodophyllotoxin is supplied as a solid. A stock solution may be made by dissolving the 4'-demethylpodophyllotoxin in the solvent of choice, which should be purged with an inert gas. 4'-Demethylpodophyllotoxin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 4'-demethylpodophyllotoxin in these solvents is approximately 2 and 3 mg/ml, respectively.

### Description

4'-Demethylpodophyllotoxin is a lignan that has been found in *D. versipellis* and has microtubule assembly inhibitory and anticancer activities.<sup>1,2</sup> It inhibits the assembly of isolated chicken brain tubulin (IC<sub>50</sub> = 0.5 μM) and the proliferation of LNCaP and PC3 prostate cancer cells (IC<sub>50</sub>s = 0.056 and 0.082 μM, respectively).

### References

- Loike, J.D., Brewer, C.F., Sternlicht, H., *et al.* Structure-activity study of the inhibition of microtubule assembly *in vitro* by podophyllotoxin and its congeners. *Cancer Res.* **38(9)**, 2688-2693 (1978).
- Jiang, R.-W., Zhou, J.-R., Hon, P.-M., *et al.* Lignans from *Dysosma versipellis* with inhibitory effects on prostate cancer cell lines. *J. Nat. Prod.* **70(2)**, 283-286 (2007).

#### 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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