PRODUCT INFORMATION



Loureirin B

Item No. 27454

CAS Registry No.: 119425-90-0

Formal Name: 1-(4-hydroxyphenyl)-3-(2,4,6-

trimethoxyphenyl)-1-propanone

MF: $C_{18}H_{20}O_5$ FW: 316.4 **Purity:** ≥98% λ_{max} : 279 nm UV/Vis.: Supplied as: A solid

-20°C Storage: Stability: ≥4 vears

Item Origin: Plant/Resina Draconis

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

Laboratory Procedures

Loureirin B is supplied as a solid. A stock solution may be made by dissolving the loureirin B in the solvent of choice, which should be purged with an inert gas. Loureirin B is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of loureirin B in these solvents is approximately 30 mg/ml.

Loureirin B is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, loureirin B should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Loureirin B has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Loureirin B is a flavonoid originally isolated from D. cochinchinensis, a major component of the traditional herbal medicine dragon's blood, and has diverse biological activities. 1-3 It inhibits K, 1.3-mediated currents, induces membrane depolarization, and reduces calcium influx in Jurkat T cells. 1 It also inhibits phytohemagglutinin-induced IL-2 release from these cells. Loureirin B (25 μg/ml) reduces type I collagen and fibronectin protein levels in TGF-β1-stimulated fibroblasts as well as contraction of TGF-β1-stimulated fibroblasts in a gel contraction assay.² It reduces type I collagen and fibronectin protein levels and inhibits phosphorylation of ERK and JNK in isolated human hypertrophic scar tissue. Loureirin B increases glucose absorption and intracellular ATP levels in Ins-1 cells via inhibition of the K_{ATP} current and intracellular influx of calcium.3

References

- 1. Yin, S., Hu, Q., Luo, J., et al. Loureirin B, an essential component of Sanguis Draxonis, inhibits Kv1.3 channel and suppresses cytokine release from Jurkat T cells. Cell Biosci. 4, 78 (2014).
- He, T., Bai, X., Yang, L., et al. Loureirin B inhibits hypertrophic scar formation via inhibition of the TGF-β1-ERK/JNK pathway. Cell Physiol. Biochem. 37(2), 666-676 (2015).
- 3. Sha, Y., Zhang, Y., Cao, J., et al. Loureirin B promotes insulin secretion through inhibition of $K_{\Delta TP}$ channel and influx of intracellular calcium. J. Cell. Biochem. 119(2), 2012-2021 (2017).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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