

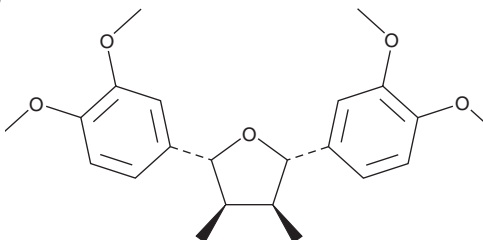
PRODUCT INFORMATION



Galgravin

Item No. 35431

CAS Registry No.: 528-63-2
Formal Name: (2R,3R,4S,5S)-*rel*-2,5-bis(3,4-dimethoxyphenyl) tetrahydro-3,4-dimethyl-furan
Synonym: (±)-Galgravin
MF: C₂₂H₂₈O₅
FW: 372.5
Purity: ≥98%
UV/Vis.: λ_{max}: 231 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Magnolia biondii*



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

Laboratory Procedures

Galgravin is supplied as a solid. A stock solution may be made by dissolving the galgravin in the solvent of choice, which should be purged with an inert gas. Galgravin is soluble in DMSO and dimethyl formamide.

Description

Galgravin is a lignan that has been found in *N. megapotamica* and has diverse biological activities.¹⁻⁴ It inhibits the binding of platelet-activating factor (PAF) to isolated rabbit platelet plasma membranes (IC₅₀ = 4.5 μM).¹ Galgravin (3-100 μM) inhibits osteoclast formation induced by RANKL and macrophage colony-stimulating factor (M-CSF) in mouse bone marrow-derived macrophages.² It protects against cytotoxicity induced by human amyloid-β (25-35) (Aβ (25-35); Item No. 24155) in primary rat hippocampal neurons when used at a concentration of 10 μM.³ Galgravin (20 mg/kg) reduces acetic acid-induced abdominal constrictions in mice and carrageenan-induced paw edema in rats.⁴

References

1. Biftu, T., Gamble, N.F., Doebber, T., *et al.* Conformation and activity of tetrahydrofuran lignans and analogues as specific platelet activating factor antagonists. *J. Med. Chem.* **29**(10), 1917-1921 (1986).
2. Asai, M., Lee, J.-W., Itakura, Y., *et al.* Effects of veraguensin and galgravin on osteoclast differentiation and function. *Cytotechnology* **64**(3), 315-322 (2012).
3. Zhai, H., Inoue, T., Moriyama, M., *et al.* Neuroprotective effects of 2,5-diaryl-3,4-dimethyltetrahydrofuran neolignans. *Biol. Pharm. Bull.* **28**(2), 289-293 (2005).
4. da Silva Filho, A.A., Andrade e Silva, M.L., Carvalho, J.C.T., *et al.* Evaluation of analgesic and anti-inflammatory activities of *Nectandra megapotamica* (Lauraceae) in mice and rats. *J. Pharm. Pharmacol.* **56**(9), 1179-1184 (2004).

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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