

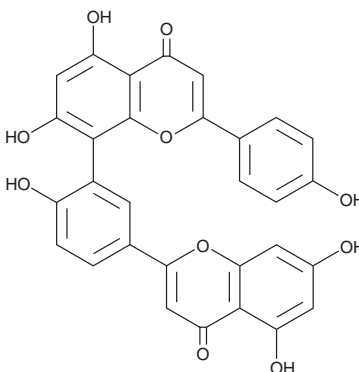
PRODUCT INFORMATION



Amentoflavone

Item No. 21779

CAS Registry No.: 1617-53-4
Formal Name: 8-[5-(5,7-dihydroxy-4-oxo-4H-1-benzopyran-2-yl)-2-hydroxyphenyl]-5,7-dihydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one
Synonyms: Didemethyl Ginkgetin, NSC 295677
MF: C₃₀H₁₈O₁₀
FW: 538.5
Purity: ≥98%
UV/Vis.: λ_{max}: 269, 335 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Amentoflavone is supplied as a crystalline solid. A stock solution may be made by dissolving the amentoflavone in the solvent of choice. Amentoflavone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of amentoflavone in these solvents is approximately 1, 10, and 20 mg/ml, respectively.

Amentoflavone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, amentoflavone should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Amentoflavone has a solubility of approximately 0.1 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Amentoflavone is a biflavonoid originally isolated from *Selaginella*. It has a wide variety of biological effects including antibacterial, antioxidant, antiviral, antidiabetic, and neuroprotective activities.¹⁻⁴ Amentoflavone has antiviral activity against the influenza A subtypes H1N1 and H3N2, influenza B, and herpes simplex virus 1 (EC₅₀s = 3.1 and 4.3, 0.56, and 17.9 µg/ml, respectively).⁵ It has antidiabetic effects such that it dose-dependently increases insulin receptor phosphorylation and activation and inhibits hydrolysis of *p*-nitrophenyl phosphate (*p*-NPP) catalyzed by protein tyrosine phosphatase 1B (PTP1B; IC₅₀ = 7.3 µM).⁶ Amentoflavone reduces the time mice spend immobile in the forced swim test, a measure of antidepressant efficacy, in a dose-dependent manner.⁷

References

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5. Lin, Y.-M., Flavin, M.T., Schure, R., et al. *Planta. Med.* **65**(2), 120-125 (1999).
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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