

PRODUCT INFORMATION



Camellianin A

Item No. 37575

CAS Registry No.: 109232-77-1
Formal Name: 5-[[6-O-acetyl-4-O-(6-deoxy- α -L-mannopyranosyl)- β -D-glucopyranosyl]oxy]-7-hydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one

MF: $C_{29}H_{32}O_{15}$

FW: 620.6

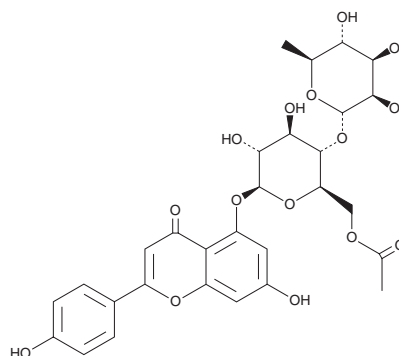
Purity: $\geq 95\%$

Supplied as: A solid

Storage: -20°C

Stability: ≥ 4 years

Item Origin: Plant/Oil tea



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

Laboratory Procedures

Camellianin A is supplied as a solid. A stock solution may be made by dissolving the camellianin A in the solvent of choice, which should be purged with an inert gas. Camellianin A is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in methanol and acetonitrile.

Camellianin A is slightly soluble (0.1-1 mg/ml) in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Camellianin A is a flavonoid that has been found in *A. nitida* and has diverse biological activities.¹⁻³ It inhibits angiotensin-converting enzyme (ACE) by 30.16% when used at a concentration of 500 $\mu\text{g/ml}$.¹ Camellianin A (200 μM) induces cell cycle arrest at the G_1 phase and apoptosis in HepG2 and MCF-7 cancer cells.¹ *In vivo*, camellianin A (30 mg/kg) reduces hepatocyte apoptosis, as well as hepatic TNF- α , IL-6, IL-1 β , and malondialdehyde (MDA) levels, in a mouse model of carbon tetrachloride-induced liver injury.³

References

1. Liu, B., Yang, J., Ma, Y., et al. Antioxidant and angiotensin converting enzyme (ACE) inhibitory activities of ethanol extract and pure flavonoids from *Adinandra nitida* leaves. *Pharm. Biol.* **48**(12), 1432-1438 (2010).
2. Gao, H., Liu, B., Liu, F., et al. Anti-proliferative effect of camellianin A in *Adinandra nitida* leaves and its apoptotic induction in human Hep G2 and MCF-7 cells. *Molecules* **15**(6), 3878-3886 (2010).
3. Chen, R., Lian, Y., Wen, S., et al. Shibi tea (*Adinandra nitida*) and camellianin a alleviate CCl_4 -induced liver injury in C57BL-6J mice by attenuation of oxidative stress, inflammation, and apoptosis. *Nutrients* **14**(15), 3037 (2022).

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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