

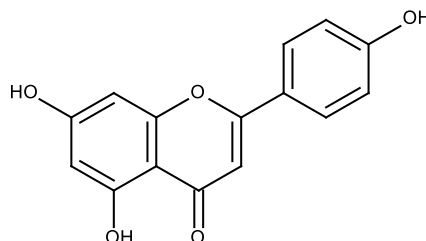
Catalog # 10-1242

Apigenin

CAS# 520-36-5

5,7-Dihydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one; 4',5,7-Trihydroxyflavone

Lot # Z102189



Apigenin is a plant flavonoid with antioxidant properties. It has been reported to have myriad effects on biochemical pathways including kinase inhibition (CK2, PKC, ERK)¹⁻³, CYP2C9 inhibition⁴, inhibition of cellular proliferation via G2/M cell cycle arrest^{3,5}, reduction of HIF-1 and VEGF expression⁶, and inhibition of nitric oxide and PGE₂ synthesis⁷.

- 1) Lin *et al.* (1997) *Suppression of protein kinase C and nuclear oncogene expression as possible molecular mechanisms of cancer chemoprevention by apigenin and curcumin.* J.Cell.Biochem.Suppl. **28-29** 39
- 2) Zhao *et al.* (2011) *Apigenin inhibits proliferation and induces apoptosis in human multiple myeloma cells through targeting the trinity of CK2, Cdc37 and Hsp90* Mol. Cancer **10** 10
- 3) Yin *et al.* (2001) *Apigenin inhibits growth and induces G2/M arrest by modulating cyclinCDK regulators and ERK MAP kinase activation in breast carcinoma cells.* Anticancer Research **21** 413
- 4) Si *et al.* (2009) *Mechanism of CYP2C9 inhibition by flavones and flavonols* Drug Metabolism and Disposition **37** 629
- 5) Sato *et al.* (1994) *Apigenin induces morphological differentiation and G2-M arrest in rat neuronal cells* Biochem. Biophys. Res. Commun. **204** 578
- 6) Fang *et al.* (2007) *Apigenin inhibits tumor angiogenesis through decreasing HIF-1alpha and VEGF expression* Carcinogenesis **28**, 858
- 7) Raso *et al.* (2001) *Inhibition of inducible nitric oxide synthase and cyclooxygenase-2 expression by flavonoids in macrophage J774A.1.* Life Sci. **68** 921

PHYSICAL DATA

Molecular Weight:	270.24
Molecular Formula:	C ₁₅ H ₁₀ O ₅
Purity:	>98% (TLC: 10% Methanol/methylene chloride; R _f = 0.50)
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml)
Physical Description:	Pale yellow solid
Storage and Stability:	Store as supplied at room temperature for up to 1 year from the date of purchase. Protect from exposure to air. Solutions in DMSO may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.