

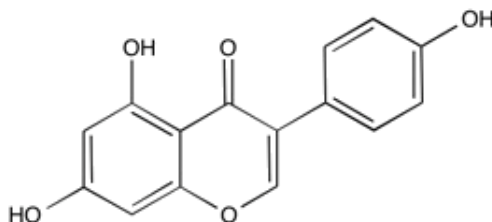
Catalog # 10-2139

Genistein

CAS# 446-72-0

5,7-Dihydroxy-3-(4-hydroxyphenyl)-4H-1-benzopyran-4-one
4',5,7-Trihydroxyisoflavone

Lot # X101025



A naturally occurring flavonoid with a wide range of biological actions. Inhibits protein tyrosine kinases including epidermal growth factor receptor kinase.^{1,2} Phytoestrogen³ and agonist at GPR30⁴. Displays cancer chemopreventive activity.⁵

- 1) Akiyama et al. (1987), *Genistein, a specific inhibitor of tyrosine-specific protein kinases*; J. Biol. Chem. **262** 5592
- 2) Linassier et al. (1990), *Mechanisms of action in NIH-3T3 cells of genistein, an inhibitor of EGF receptor tyrosine kinase*; Biochem. Pharmacol., **39** 187
- 3) Dang et al. (2003), *Peroxisome proliferator-activated receptor gamma (PPARgamma) as a molecular target for the soy phytoestrogen genistein*; J. Biol. Chem. 278 962
- 4) Vivacqua et al. (2006), *17beta-estradiol, genistein, and 4-hydroxytamoxifen induce the proliferation of thyroid cancer cells through the G protein-coupled receptor GPR30*; Mol. Pharmacol. **70** 1414
- 5) Sarker and Li (2002), *Mechanisms of cancer chemoprevention by soy isoflavone genistein*; Cancer Metastasis Rev. **21** 265

PHYSICAL DATA

Molecular Weight:	270.24
Molecular Formula:	C ₁₅ H ₁₀ O ₅
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	Soluble in DMSO (up to 25 mg/ml) or in Ethanol (up to 4 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 week.

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