



Product Information

Product ID G1653

CAS No. 529-59-9

Chemical Name

Synonym Genistoside, Isoflavone, 4',5,7-trihydroxy-, 7-D-glucoside, GENISTEIN-7-O-GLUCOSIDE

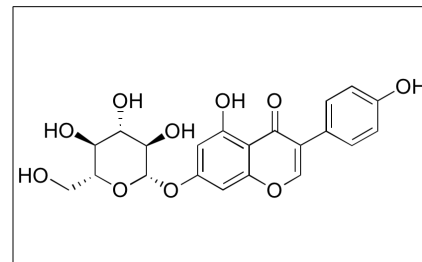
Formula C₂₁H₂₀O₁₀

Formula Wt. 432.38

Melting Point 254-256°C

Purity ≥98%

Solubility



Bulk quantities available upon request

Product ID	Size
G1653	1 mg
G1653	5 mg

Store Temp Ambient

Ship Temp Ambient

Description Genistin is the less active glycoside analog of genistein, an isoflavone found in soy and other plant-based products. Genistin exhibits anticancer, anti-resorptive, anti-osteoporotic, and gastrointestinal motility modulating activities; it also acts as a phytoestrogen. In ovarian cancer cells, genistin induces cell cycle arrest at G2/M and G1 phases as well as apoptosis, inhibiting proliferation. In ovariectomized rats, genistin increases Ca²⁺ and phosphorus content, improving bone density and strength. Additionally, genistin inhibits ex vivo muscular contractions in the jejunum by decreasing myosin light chain kinase (MLCK) levels and inhibiting myosin activity. Genistin also has estrogenic/anti-estrogenic activities, acting as a selective estrogen receptor modulator (SERM) depending on concentrations and tissue location.

References Xiong YJ, Chen DP, Lv BC, et al. The characteristics of genistin-induced inhibitory effects on intestinal motility. Arch Pharm Res. 2013 Mar;36(3):345-52. PMID: 23435915.

Choi EJ, Kim T, Lee MS. Pro-apoptotic effect and cytotoxicity of genistein and genistin in human ovarian cancer SK-OV-3 cells. Life Sci. 2007 Mar 20;80(15):1403-8. PMID: 17291540.

Hwang CS, Kwak HS, Lim HJ, et al. Isoflavone metabolites and their in vitro dual functions: they can act as an estrogenic agonist or antagonist depending on the estrogen concentration. J Steroid Biochem Mol Biol. 2006 Nov;101(4-5):246-53. PMID: 16965913.

Ishida H, Uesugi T, Hirai K, et al. Preventive effects of the plant isoflavones, daidzin and genistin, on bone loss in ovariectomized rats fed a calcium-deficient diet. Biol Pharm Bull. 1998 Jan;21(1):62-6. PMID: 9477170.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.