

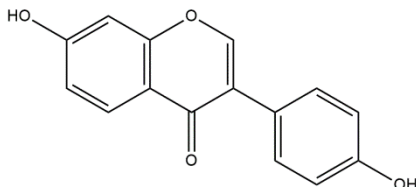
# Daidzein

09/19

**ALTERNATE NAMES:** Daidzeol; 4',7-Dihydroxyisoflavone; 7,4'-Dihydroxyisoflavone; 4,7-Dihydroxyisoflavone; 7-hydroxy-3-(4-hydroxyphenyl)chromen-4-one; 7-Hydroxy-3-(4-hydroxyphenyl)-4-benzopyrone; 7-Hydroxy-3-(4-hydroxyphenyl)-4H-1-benzopyran-4-one

**CATALOG #:** B2906-50 50 mg  
B2906-250 250 mg

**STRUCTURE:**



**MOLECULAR FORMULA:** C<sub>15</sub>H<sub>10</sub>O<sub>4</sub>

**MOLECULAR WEIGHT:** 254.24

**CAS NUMBER:** 486-66-8

**APPEARANCE:** A crystalline solid

**PURITY:** ≥95%

**SOLUBILITY:** ~30 mg/ml in DMSO  
~10 mg/ml in DMF  
~0.1 mg/ml in Ethanol

**DESCRIPTION:** Daidzein is an isoflavone phytoestrogen found in soybean, with antioxidant properties. It increases transactivation of estrogen receptor  $\beta$ -induced transcription. It binds to estrogen receptor  $\beta$  (ER- $\beta$ ; K<sub>i</sub> = 2.8  $\mu$ M) but not ER- $\alpha$  at concentrations up to 1 mM. Daidzein does not increase metastasis to lymph nodes and acts as a radiosensitizer in mice bearing PC-3 prostate tumors.

**STORAGE TEMPERATURE:** -20°C. Protect from air. Store under desiccating conditions.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**REFERENCES:**

- Harris, D.M., Besselink, E., Henning, S.M., et al. Phytoestrogens induce differential estrogen receptor alpha- or beta-mediated responses in transfected breast cancer cells. *Exp. Biol. Med.* (Maywood) 230(8), 558-568 (2005).
- Singh-Gupta, V., Zhang, H., Yunker, C.K., et al. Daidzein effect on hormone refractory prostate cancer in vitro and in vivo compared to genistein and soy extract: Potentiation of radiotherapy. *Pharm. Res.* 27(6), 1115-1127 (2010).
- Kładna, A., Berczyński, P., Kruk, I. et al. Studies on the antioxidant properties of some phytoestrogens. *Luminescence. Sep*;31(6):1201-1206 (2016).
- Zhao, L., and Brinton, R.D. Structure-based virtual screening for plant-based ER $\beta$ -selective ligands as potential preventative therapy against age-related neurodegenerative diseases. *J. Med. Chem.* 48(10), 3463-3466 (2005).

**RELATED PRODUCTS:**

Lasofoxifene tartrate (Cat. No. 9680)  
 Naringenin (Cat. No. 1772)  
 Endoxifen (Cat. No. 9614)  
 Piperine (Cat. No. B2086)  
 (Z)-4-Hydroxytamoxifen (Cat. No. B1114)

**DISCLAIMER:** *FOR RESEARCH USE ONLY! Not to be used on humans.*