

Certificate of Analysis

www.tocris.com

Product Name: Daidzein

CAS Number: 486-66-8

IUPAC Name: 7-Hydroxy-3-(4-hydroxyphenyl)-4H-1-benzopyran-4-one

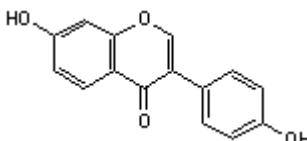
Catalog No.: 1417

Batch No.: 2

EC Number: 207-635-4

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₅H₁₀O₄
Batch Molecular Weight: 254.24
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 1eq. NaOH to 20 mM with gentle warming
Storage: Desiccate at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.27 (Dichloromethane:Methanol:Ammonia soln. [9:1:0.1])
Melting Point: Between 305 - 315°C(dec)
HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	70.86	3.96	
Found	70.58	4.02	

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Daidzein

CAS Number: 486-66-8

IUPAC Name: 7-Hydroxy-3-(4-hydroxyphenyl)-4H-1-benzopyran-4-one

Catalog No.: 1417

Batch No.: 2

EC Number: 207-635-4

Description:

Analog of the phytoestrogen genistein (Cat. No. 1110). Blocks G₁ phase cell cycle progression. Agonist at estrogen receptors.

Physical and Chemical Properties:

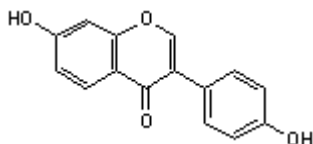
Batch Molecular Formula: C₁₅H₁₀O₄

Batch Molecular Weight: 254.24

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Desiccate at -20°C

Solubility & Usage Info:

DMSO to 100 mM

1eq. NaOH to 20 mM with gentle warming

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Jing *et al* (1993) Differentiation of promyelocytic leukemia cells HL-60 induced by daidzein in vitro and in vivo. *Anticancer Res.* **13** 1049. PMID: 8352524.

Higashi and Ogawara (1994) Daidzein inhibits insulin- or insulin-like growth factor-1-mediated signaling in cell cycle progression of Swiss 3T3 cells. *Biochim.Biophys.Acta* **1221** 29. PMID: 8130274.

Casanova *et al* (1999) Development effects of dietary phytoestrogens in Sprague Dawley rats and interactions of genistein and daidzein with rat estrogen receptors α and β *in vitro*. *Toxicol.Sci.* **51** 236. PMID: 10543025.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956