

Product Name: Fisetin

Catalog No.: 5016

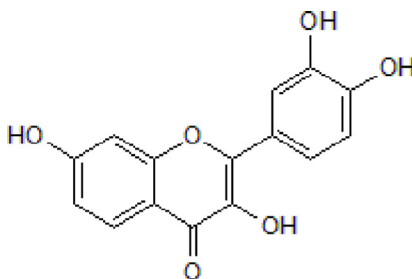
Batch No.: 3

CAS Number: 528-48-3

IUPAC Name: 2-(3,4-Dihydroxyphenyl)-3,7-dihydroxy-4*H*-1-benzopyran-4-one

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C <sub>15</sub> H <sub>10</sub> O <sub>6</sub> ·½H <sub>2</sub> O
Batch Molecular Weight:	295.25
Physical Appearance:	Yellow solid
Solubility:	DMSO to 100 mM ethanol to 10 mM
Storage:	Store at -20°C
Batch Molecular Structure:	



## 2. ANALYTICAL DATA

HPLC:	Shows 97.8% purity
<sup>1</sup> H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure
Microanalysis:	Carbon Hydrogen Nitrogen
	Theoretical 61.02 3.76
	Found 60.02 3.85

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

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**Description:**

Fisetin is a naturally occurring flavonoid and antioxidant. Inhibits PI 3-K, Akt, mTOR and Cdk6. Displays antiproliferative activity in prostate cancer cells. Shown to activate ERK; exhibits neuroprotective activity in Huntington's disease models. Also a DNMT1 inhibitor.

**Physical and Chemical Properties:**

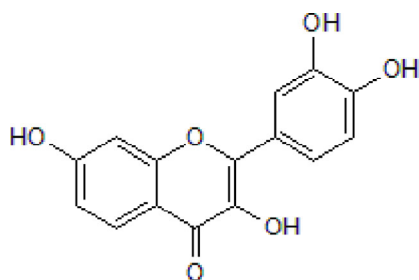
Batch Molecular Formula: C<sub>15</sub>H<sub>10</sub>O<sub>6</sub>.½H<sub>2</sub>O

Batch Molecular Weight: 295.25

Physical Appearance: Yellow solid

**Minimum Purity:** ≥97%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 10 mM

**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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**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:**

**Adhami *et al*** (2012) Dietary flavonoid fisetin: a novel dual inhibitor of PI3K/Akt and mTOR for prostate cancer management. *Biochem.Pharmacol.* **84** 1277. PMID: 22842629.

**Maher *et al*** (2011) ERK activation by the polyphenols fisetin and resveratrol provides neuroprotection in multiple models of Huntington's disease. *Hum.Mol.Genet.* **20** 261. PMID: 20952447.

**Haddad *et al*** (2010) Antiproliferative mechanisms of the flavonoids 2,2'-dihydroxychalcone and fisetin in human prostate cancer cells. *Nutr.Cancer* **62** 668. PMID: 20574928.

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**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