

**Product Name:** Myricetin

**Catalog No.:** 6189

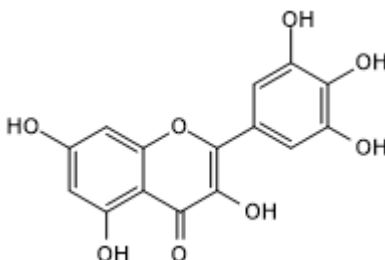
**Batch No.:** 1

CAS Number: 529-44-2

IUPAC Name: 3,5,7-Trihydroxy-2-(3,4,5-trihydroxyphenyl)-4*H*-1-benzopyran-4-one

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>15</sub>H<sub>10</sub>O<sub>8</sub>·H<sub>2</sub>O  
**Batch Molecular Weight:** 336.26  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 50 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 97.7% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	53.58	3.6	
Found	53.6	3.57	

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

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**Description:**

Irreversible TrxR inhibitor ( $IC_{50} = 0.62 \mu M$ ). Exhibits concentration-, time- and NADH-dependent TrxR inhibition. Results in the oxidation of Trx and reduced TrxR activity in vitro in addition to the accumulation of cells in sub-G<sub>1</sub> phase. Reduces neoplastic transformation and induces cell death in cancer cell lines. Chemotherapeutic.

**Physical and Chemical Properties:**

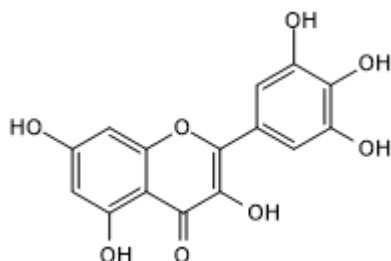
Batch Molecular Formula: C<sub>15</sub>H<sub>10</sub>O<sub>8</sub>·H<sub>2</sub>O

Batch Molecular Weight: 336.26

Physical Appearance: Yellow solid

**Minimum Purity:** >97%

**Batch Molecular Structure:**



**References:**

**Devi et al** (2015) Molecular mechanisms underlying anticancer effects of myricetin. *Life.Sci.* **142** 19. PMID: 26455550.

**Lu & Holmgren et al** (2009) Selenoproteins. *J.Biol.Chem.* **284** 723. PMID: 18757362 .

**Lu et al** (2006) Inhibition of mammalian thioredoxin reductase by some flavonoids: implications for myricetin and quercetin anticancer activity. *Cancer.Res.* **66** 4410. PMID: 16618767.

**Ko et al** (2005) Mitochondrial-dependent, reactive oxygen species-independent apoptosis by myricetin: roles of protein kinase C, cytochrome c, and caspase cascade. *Biochem.Pharmacol.* **69** 913. PMID: 15748703.

**Ong & Khoo et al** (1997) Biological effects of myricetin. *Gen.Pharmacol.* **29** 121. PMID: 9251891.

**Storage:** Store at -20°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 50 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. 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.

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