

## Certificate of Analysis

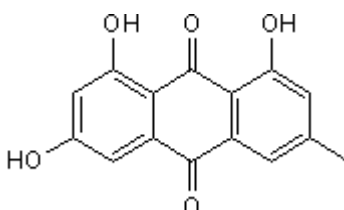
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**Product Name:** Emodin  
**CAS Number:** 518-82-1  
**IUPAC Name:** 1,3,8-Trihydroxy-6-methyl-9,10-anthracenedione

**Catalog No.:** 3811  
**Batch No.:** 1  
**EC Number:** 208-258-8

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{15}H_{10}O_5 \cdot \frac{1}{2}H_2O$   
**Batch Molecular Weight:** 279.25  
**Physical Appearance:** Orange solid  
**Solubility:** 1eq. NaOH to 100 mM  
 DMSO to 50 mM  
**Storage:** Store at +4°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	64.52	3.97	
Found	64.4	3.92	

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

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**Description:**

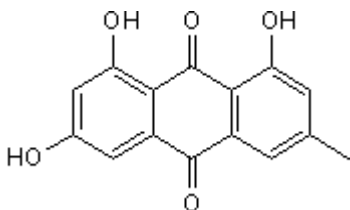
Naturally occurring anthraquinone that displays a range of biological activities. Exhibits anti-inflammatory, antitumor and neuroprotective effects.

**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>·½H<sub>2</sub>O  
 Batch Molecular Weight: 279.25  
 Physical Appearance: Orange solid

**Minimum Purity:** >97%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

1eq. NaOH to 100 mM  
 DMSO 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.

**References:**

**Wu et al (2007)** Emodin-mediated protection from acute myocardial infarction via inhibition of inflammation and apoptosis in local ischemic myocardium. *Life Sci.* **81** 1332. PMID: 17939930.

**Chun-Guang et al (2010)** Anti-tumor activity of emodin against human chronic myelocytic leukemia K562 cell lines in vitro and in vivo. *Eur.J.Pharmacol.* **627** 33. PMID: 19857484.

**Liu et al (2010)** Neuroprotective effects of emodin in rat cortical neurons against β-amyloid-induced neurotoxicity. *Brain Res.* **1347** 149. PMID: 20573598.

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