

## Product Information

**Product ID** A4617  
**CAS No.** 481-72-1  
**Chemical Name** 1,8-Dihydroxy-3-(hydroxymethyl)-9,10-anthracenedione

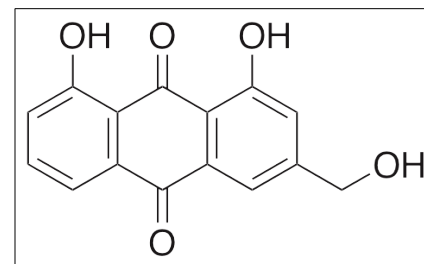
### Synonym

**Formula** C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>  
**Formula Wt.** 270.24  
**Melting Point** 223-224 °C  
**Purity** ≥98%  
**Solubility** Soluble in water (partly), hot alcohol, methanol, chloroform, and DMSO (50 mg/ml)

**Store Temp** -20 °C

**Ship Temp** Ambient

**Description** Aloe emodin is an anthraquinone found in the aloe plant. Aloe emodin is most commonly known for its stimulant-laxative action, but also shows antioxidative, anticancer chemotherapeutic, and anti-angiogenic activity. This compound activates CFTR Cl<sup>-</sup> channels in the colon, potentially increasing fluid secretion and resulting in laxative activity. Aloe emodin acts on a number of targets in cellular models of cancer, including p65IκB, ERα, NF-κB, and mTORC2. Additionally, aloe emodin induces apoptosis in glioma models through disruption of the mitochondria membrane potential.



**Bulk quantities available upon request**

Product ID	Size
A4617	25 mg
A4617	100 mg
A4617	250 mg

**References** Ismail S, Haris K, Abdul Ghani AR, et al. Enhanced induction of cell cycle arrest and apoptosis via the mitochondrial membrane potential disruption in human U87 malignant glioma cells by aloe emodin. *J Asian Nat Prod Res.* 2013 Jul 22. [Epub ahead of print]. PMID: 23869465.

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Zhang W, Chen H, Liu DL, et al. Emodin sensitizes the gemcitabine-resistant cell line Bxpc-3/Gem to gemcitabine via downregulation of NF-κB and its regulated targets. *Int J Oncol.* 2013 Apr;42(4):1189-96. PMID: 23440366.

Liu K, Park C, Li S, et al. Aloe-emodin suppresses prostate cancer by targeting the mTOR complex 2. *Carcinogenesis.* 2012 Jul;33(7):1406-11. PMID: 22532249.

Yang H, Xu LN, He CY, et al. CFTR chloride channel as a molecular target of anthraquinone compounds in herbal laxatives. *Acta Pharmacol Sin.* 2011 Jun;32(6):834-9. PMID: 21602836.

Srinivas G, Babykutty S, Sathiadevan PP, et al. Molecular mechanism of emodin action: transition from laxative ingredient to an antitumor agent. *Med Res Rev.* 2007 Sep;27(5):591-608. PMID: 17019678.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.