

## Certificate of Analysis

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**Product Name:** Cardamonin

**Catalog No.:** 2509

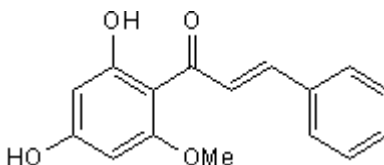
**Batch No.:** 2

CAS Number: 19309-14-9

IUPAC Name: (2E)-1-(2,4-Dihydroxy-6-methoxyphenyl)-3-phenyl-2-propen-1-one

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>  
**Batch Molecular Weight:** 270.28  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 20 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 99.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	71.1	5.22	
Found	70.99	5.07	

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

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**Description:**

Chalone analog that display anti-inflammatory activity. Inhibits NO and PGE<sub>2</sub> production from LPS- and IFN-γ-induced RAW cells and inhibits TXB<sub>2</sub> production via the COX-1 and COX-2 pathways. Inhibits NF-κB activation via inhibition of IκBα degradation and phosphorylation, IκB kinase activation and NF-κB nuclear translocation.

**Physical and Chemical Properties:**

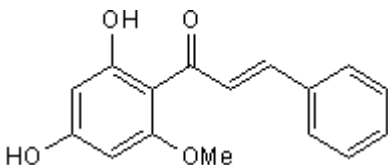
Batch Molecular Formula: C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>

Batch Molecular Weight: 270.28

Physical Appearance: Yellow solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Israf et al** (2007) Cardamonin inhibits COX and iNOS expression via inhibition of p65NF-κB nuclear translocation and Iκ-B phosphorylation in RAW 264.7 macrophage cells. *Mol.Immunol.* **44** 673. PMID: 16777230.

**Ahmad et al** (2006) Cardamonin, inhibits pro-inflammatory mediators in activated RAW 264.7 cells and whole blood. *Eur.J.Pharmacol.* **538** 188. PMID: 16650843.

**Lee et al** (2006) Blockade of nuclear factor-κB signaling pathway and anti-inflammatory activity of Cardamomin, a chalcone analog from *Alpina conchigera*. *J.Pharmacol.Exp.Ther.* **316** 271. PMID: 16183703.

**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 20 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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