

# **Certificate of Analysis**

Print Date: Mar 30th 2022

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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: $C_{16}H_{14}O_4$ Batch Molecular Weight:270.28Physical 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 99.2% 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

29449 www.tocris.com/distributors Tel:+1 612 379 2956



# **Product Information**

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### **Description:**

Cardamonin is a chalone analog that display anti-inflammatory activity. Inhibits NO and PGE $_2$  production from LPS- and IFN- $\gamma$ -induced RAW cells and inhibits TXB $_2$  production via the COX-1 and COX-2 pathways. Inhibits NF- $\kappa$ B activation via inhibition of I $\kappa$ B $\alpha$  degradation and phosphorylation, I $\kappa$ B kinase activation and NF- $\kappa$ B 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:**

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.

## 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.

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