

**Product Name:** Parthenolide

**Catalog No.:** 0610

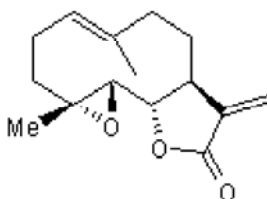
**Batch No.:** 14

CAS Number: 20554-84-1

IUPAC Name: [1a*R*-(1a*R*\*,4*E*,7a*S*\*,10a*S*\*,-10b*R*\*)]-2,3-6,7,7a,8,10a,10b-Octahydro-1a,5-dimethyl-8-methyleneoxireno[9,10]cyclodeca[1,2-*b*]furan-9(1a*H*)-one

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>15</sub>H<sub>20</sub>O<sub>3</sub>  
**Batch Molecular Weight:** 248.32  
**Physical Appearance:** Off White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 100 mM  
**Storage:** Desiccate at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 98.3% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	72.55	8.12	
Found	72.56	8.14	

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

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**Description:**

The active principle of feverfew (*Chrysanthemum parthenium*). Antisecretory, anti-inflammatory and spasmolytic; inhibits the release of 5-HT from blood platelets. Also inhibits activation of NF-κB, and generation of leukotriene B<sub>4</sub> and thromboxane B<sub>2</sub>.

**Physical and Chemical Properties:**

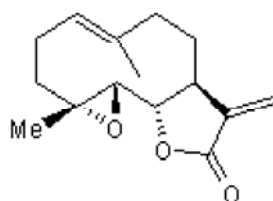
Batch Molecular Formula: C<sub>15</sub>H<sub>20</sub>O<sub>3</sub>

Batch Molecular Weight: 248.32

Physical Appearance: Off White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Desiccate at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol to 100 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:**

**Hehner et al** (1998) Sesquiterpene lactones specifically inhibit activation of NF-κB by preventing the degradation of IκB-α and IκB-β. *J.Biol.Chem.* **273** 1288. PMID: 9430659.

**Sumner et al** (1992) Inhibition of 5-lipoxygenase and cyclo-oxygenase in leukocytes by feverfew. Involvement of sesquiterpene lactones and other components. *Biochem.Pharmacol.* **43** 2313. PMID: 1319159.

**Groenewegen and Heptinstall** (1990) A comparison of the effects of an extract of feverfew and parthenolide, a component of feverfew, on human platelet activity *in vitro*. *J.Pharm.Pharmacol.* **42** 553. PMID: 1981582.

**Heptinstall et al** (1986) Compounds extracted from feverfew that have anti-secretory activity contain an α-methylene butyrolactone unit. *J.Pharm.Pharmacol.* **38** 709. PMID: 2877077.

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**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956