

Product Name: Andrographolide

Catalog No.: 4626 **Batch No.:** 1

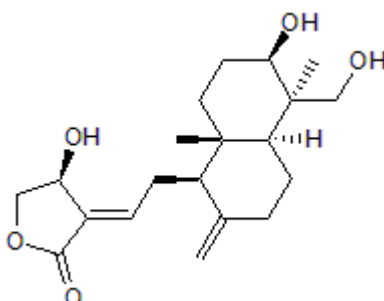
CAS Number: 5508-58-7

EC Number: 226-852-5

IUPAC Name: (3*E*,4*S*)-3-[2-[(1*R*,4*aS*,5*R*,6*R*,8*aS*)-Decahydro-6-hydroxy-5-(hydroxymethyl)-5,8*a*-dimethyl-2-methylene-1-naphthalenyl]ethylidene]dihydro-4-hydroxy-2(3*H*)-furanone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₀H₃₀O₅
Batch Molecular Weight: 350.45
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 ethanol to 10 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.8% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = -98.3 (Concentration = 1, Solvent = Acetic acid)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	68.54	8.63	
Found	68.4	8.67	

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

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Description:

Inhibitor of NF-κB signaling; also attenuates concanavaline-induced IFNγ production in murine T cells (IC₅₀ = 1.7 μM). Blocks androgen receptor (AR) expression in AR-expressing C4-2 cells. Activates Nrf2 in BEAS-2B cells in response to cigarette smoke extract.

Physical and Chemical Properties:

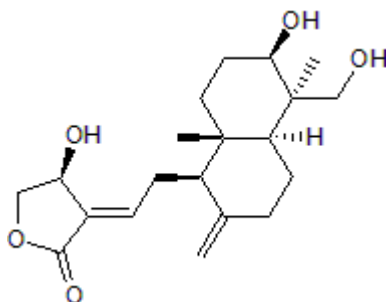
Batch Molecular Formula: C₂₀H₃₀O₅

Batch Molecular Weight: 350.45

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 10 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:

Burgos et al (2005) Andrographolide inhibits IFN-gamma and IL-2 cytokine production and protects against cell apoptosis. *Planta.Med.* **71** 429. PMID: 15931581.

Liu et al (2011) Andrographolide targets androgen receptor pathway in castration-resistant prostate cancer. *Genes Cancer.* **2** 151. PMID: 21779488.

Guan et al (2012) Andrographolide protects against cigarette smoke-induced oxidative lung injury via augmentation of Nrf2 activity. *Br.J.Pharmacol.* [Epub ahead of print]. PMID: 23146110.

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