# a biotechne brand

Batch No.: 3

# **Certificate of Analysis**

# www.tocris.com

Catalog No.: 1964

### Product Name: Gossypol

CAS Number: IUPAC Name: 303-45-7

1,1',6,6',7,7'-Hexahydroxy-3,3'-dimethyl-5,5'-bis(1-methylethyl)-[2,2'-binaphthalene]-8,8'-dicarboxaldehyde

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility: C<sub>30</sub>H<sub>30</sub>O<sub>8</sub> 518.56 Yellow solid ethanol to 25 mM with gentle warming DMSO to 25 mM Store at -20°C





## 2. ANALYTICAL DATA

TLC: HPLC: <sup>1</sup>H NMR: Mass Spectrum: Microanalysis:

R <sub>f</sub> = 0.2 (Ethyl acetate)							
Shows >98.8% purity							
Consistent with structure							
Consistent with structure							
Carbon Hydrogen Nitrogen							
Theoretical	69.49	5.83					
Found	69.32	5.83	0.02				

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

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# TOCRIS a biotechne brand

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#### Product Name: Gossypol

303-45-7

CAS Number:

IUPAC Name: 1,1',6,6',7,7'-Hexahydroxy-3,3'-dimethyl-5,5'-bis(1-methylethyl)-[2,2'-binaphthalene]-8,8'-dicarboxaldehyde

#### **Description:**

Lipophilic agent derived from cottonseed. Exhibits multiple biological effects including antifertility and anticancer activity. Proapoptotic; downregulates Bcl-2 and Bcl-XL. R-enantiomer available (Cat. No. 3367).

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>30</sub>H<sub>30</sub>O<sub>8</sub> Batch Molecular Weight: 518.56 Physical Appearance: Yellow solid

#### **Minimum Purity: >98%**

#### **Batch Molecular Structure:**



#### Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Catalog No.: 1964

#### Solubility & Usage Info:

ethanol to 25 mM with gentle warming DMSO to 25 mM

In addition research has shown that this product rapidly decomposes in solution (Becattini *et al Chem. and Biol.* 11, 389, 2004) . Therefore we recommend that once a solution of this product is prepared it is stored at -20°C and used within 24 hours.

#### 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:**

Zhang et al (2003) Molecular mechanism of gossypol-induced cell growth inhibition and cell death of HT-29 human colon carcinoma cells. Biochem.Pharmacol. 66 93. PMID: 12818369.

Coutinh (2002) Gossypol: a contraceptive for men. Contraception 65 259. PMID: 12020773.

Vander Jagt et al (2000) Gosspyol: prototype of inhibitors targeted to dinucleotide folds. Curr.Med.Chem. 7 479. PMID: 10702620.

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