

Product Name: Tanshinone IIA

Catalog No.: 4426

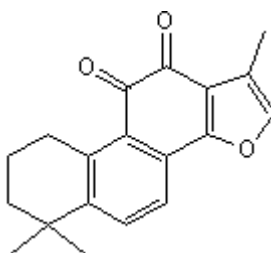
Batch No.: 1

CAS Number: 568-72-9

IUPAC Name: 6,7,8,9-Tetrahydro-1,6,6-trimethylphenanthro[1,2-b]furan-10,11-dione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₁₈O₃
Batch Molecular Weight: 294.34
Physical Appearance: Orange solid
Solubility: DMSO to 5 mM with gentle warming
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.6% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	77.53	6.16	
Found	77.45	6.26	

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

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Description:

Major tanshinone isolated from *Salvia miltiorrhiza*. Inhibits NF- κ B and AP-1 DNA binding. Exhibits cytotoxic activity in a number of different cancer cells. Inhibits β -amyloid aggregation and protects PC12 cells from β -amyloid-induced apoptosis. Displays antioxidant and anti-inflammatory properties.

Physical and Chemical Properties:

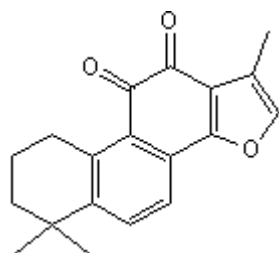
Batch Molecular Formula: C₁₉H₁₈O₃

Batch Molecular Weight: 294.34

Physical Appearance: Orange solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 5 mM with gentle warming

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:

Wang *et al* (2007) Growth inhibition and induction of apoptosis and differentiation of tanshinone IIA in human glioma cells. *J.Neurooncol.* **82** 11. PMID: 16955220.

Jin *et al* (2008) Tanshinone IIA from *Salvia miltiorrhiza* BUNGE inhibits human aortic smooth muscle cell migration and MMP-9 activity through AKT signaling pathway. *J.Cell Biochem.* **104** 15. PMID: 17979138.

Lee *et al* (2008) Anticancer effects of tanshinone I in human non-small cell lung cancer. *Mol.Cancer Ther.* **7** 3527.

Dong *et al* (2012) Tanshinone IIA protects PC12 cells from β -amyloid(25-35)-induced apoptosis via PI3K/Akt signaling pathway. *Mol.Biol.Rep.* **39** 6495. PMID: 22314911.

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