

**Product Name:** Piceatannol

**Catalog No.:** 1554

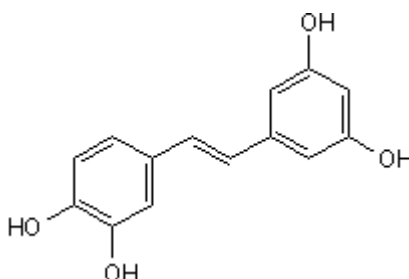
**Batch No.:** 7

CAS Number: 10083-24-6

IUPAC Name: 4-[(1E)-2-(3,5-Dihydroxyphenyl)ethenyl]-1,2-benzenediol

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>  
**Batch Molecular Weight:** 244.25  
**Physical Appearance:** Off-white solid  
**Solubility:** ethanol to 100 mM  
 DMSO to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.25 (Ethyl acetate:Petroleum ether [1:1])  
**HPLC:** Shows >99.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	68.85	4.95	
Found	68.76	5.06	

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

**Product Name:** Piceatannol

**Catalog No.:** 1554

**Batch No.:** 7

**CAS Number:** 10083-24-6

**IUPAC Name:** 4-[(1E)-2-(3,5-Dihydroxyphenyl)ethenyl]-1,2-benzenediol

**Description:**

Anti-inflammatory, immunomodulatory and antiproliferative agent. Inhibits p56<sup>lck</sup> and syk protein tyrosine kinases and inhibits TNF-induced NF-κB activation and gene expression. Synthesis results from conversion of resveratrol (Cat. No. 1418) by cytochrome P450 1B1.

**Physical and Chemical Properties:**

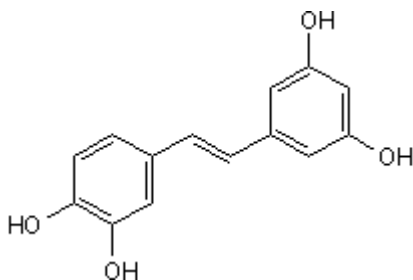
Batch Molecular Formula: C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>

Batch Molecular Weight: 244.25

Physical Appearance: Off-white solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Geahlen and McLaughlin** (1989) Piceatannol (3,4,3',5'-tetrahydroxy-trans-stilbene) is a naturally occurring protein-tyrosine kinase inhibitor. *Biochem.Biophys.Res.Commun.* **165** 241. PMID: 2590224.

**Oliver et al** (1994) Inhibition of mast cell FcεR1-mediated signalling and effector function by the syk-selective inhibitor, piceatannol. *J.Biol.Chem.* **269** 29697. PMID: 7961959.

**Potter et al** (2002) The cancer preventative agent resveratrol is converted to the anticancer agent piceatannol by the cytochrome P450 enzyme CYP1B1. *Br.J.Cancer* **86** 774. PMID: 11875742.

**Ashikawa et al** (2002) Piceatannol inhibits TNF-induced NF-κB activation and NF-κB-mediated gene expression through suppression of IκBα kinase and p65 phosphorylation. *J.Immunol.* **169** 6490. PMID: 12444159.

**Storage:** Store at +4°C

**Solubility & Usage Info:**

ethanol to 100 mM

DMSO 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.

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

Tocris Bioscience is an R&D Systems company  
USA & CANADA Tel: (800) 343-7475 EUROPE Tel: +44 (0)1235 529449 CHINA Tel: +86 (21) 52380373  
[www.RnDSystems.com](http://www.RnDSystems.com)

**R&D**  
SYSTEMS®