Print Date: Apr 2nd 2020

# Certificate of Analysis

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**Product Name:** **Piceatannol** **Catalog No.: 1554** **Batch No.: 8**

CAS Number: 10083-24-6

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

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** $C_{14}H_{12}O_4$

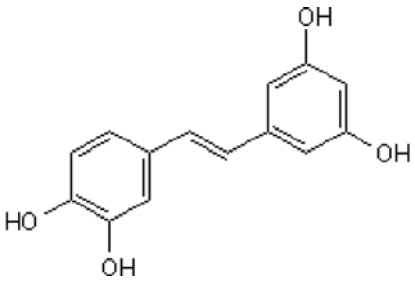
**Batch Molecular Weight:** 244.25

**Physical Appearance:** Beige solid

**Solubility:** ethanol to 100 mM
DMSO to 100 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**




## 2. ANALYTICAL DATA

**HPLC:** Shows 98.5% purity

**$^1$H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

| | Carbon | Hydrogen | Nitrogen |
|---|---|---|---|
| Theoretical | 68.85 | 4.95 | 0 |
| Found | 68.44 | 4.8 | 0 |



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**Description:**

Anti-inflammatory, immunomodulatory and antiproliferative agent. Inhibits $p56^{lck}$ 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:**

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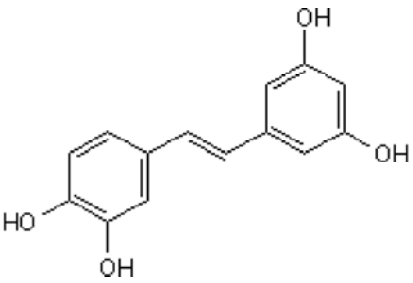
Batch Molecular Weight: 244.25

Physical Appearance: Beige solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**




**Storage:** Store at +4°C

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

**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.

**References:**

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

**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.

**Oliver** *et al* (1994) Inhibition of mast cell FceR1-mediated signalling and effector function by the syk-selective inhibitor, piceatannol. J.Biol.Chem. ***269*** 29697. PMID: 7961959.

**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.