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ProductInformation

Piceatannol

Product Number **P 0453**
Store Temperature 2-8 °C

Product Description

Molecular Formula: $C_{14}H_{12}O_4$
Molecular Weight: 244.2
CAS Number: 10083-24-6
Synonyms: (E)-4-[2-(3,5-Dihydroxyphenyl)ethenyl]-1,2-benzenediol, 3,3',4,5'-Tetrahydroxy-trans-stilbene

Piceatannol is a metabolite that occurs in the plant *Euphorbia lagascae*.[1] It is a tetrahydroxystilbene and an analog of resveratrol that has been investigated for its potential antioxidant activities.[2] A report on the cell and enzyme based *in vitro* screening of potential cancer chemopreventive agents, including piceatannol, has been published.[3]

Picetannol has been shown to interfere with the cytokine signaling pathway, notably in the inhibition of the Syk nonreceptor kinases.[4,5] It has inhibitory activity against various enzymes, such as c-Jun N-terminal kinase, the p40 tyrosine kinase, and mitochondrial F0F1-ATPase.[6,7,8] Picetannol has been shown to interfere with the antigen presenting capacity of interferonγ treated mouse mast cells.[9] It also inhibits the activation of NFκB in human cultured cells, after treatment of with various inflammatory agents, through inhibition of IκBα kinase and p65 phosphorylation.[10]

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in ethanol (10 mg/ml), yielding a clear, faint yellow to yellow solution. It is also soluble in DMSO (10 mg/ml). The solubility in water is more limited (0.5 mg/ml).

Storage/Stability

This product is photosensitive and should be stored protected from light.

References

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4. Peters, J. D., et al., Syk, activated by cross-linking the B-cell antigen receptor, localizes to the cytosol where it interacts with and phosphorylates αtubulin on tyrosine. J. Biol. Chem., **271(9)**, 4755-4762 (1996).
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