Magnolol

CAS Registry No.: 528-43-8
Formal Name: 5,5'-di-2-propen-1-yl-[1,1'-biphenyl]-2,2'-diol
Synonym: NSC 293099
MF: C_{18}H_{18}O_{2}
FW: 266.3
Purity: ≥98%
UV/Vis.: A_{max} = 215, 292 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Magnolol is supplied as a crystalline solid. A stock solution may be made by dissolving the magnolol in the solvent of choice, which should be purged with an inert gas. Magnolol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of magnolol in DMSO is approximately 16 mg/ml and approximately 20 mg/ml in ethanol and DMF.

Magnolol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, magnolol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Magnolol has a solubility of approximately 0.16 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Magnolol is a bioactive compound isolated from the bark of *M. officinalis* that has been used in Asian traditional medicine for the treatment of anxiety, sleep disorders, and allergic diseases. Magnolol can activate cannabinoid (CB) receptors, behaving as a partial agonist with selectivity for the peripheral CB\textsubscript{2} subtype (EC\textsubscript{50} = 3.28 μM; K\textsubscript{i} = 1.44 μM) versus central CB\textsubscript{1} (EC\textsubscript{50} = 18.3 μM; K\textsubscript{i} = 3.15 μM).\textsuperscript{1}

Reference