

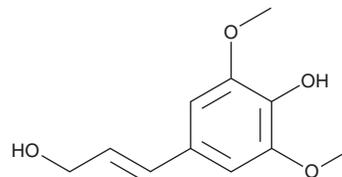
PRODUCT INFORMATION



Sinapyl Alcohol

Item No. 33916

CAS Registry No.: 537-33-7
Formal Name: 4-(3-hydroxy-1-propen-1-yl)-2,6-dimethoxy-phenol
MF: C₁₁H₁₄O₄
FW: 210.2
Purity: ≥95%
UV/Vis.: λ_{max}: 223, 276 nm
Supplied as: A solid (stabilized with MEHQ, 0.2% w/w)
Storage: -20°C
Stability: ≥4 years
Item Origin: Synthetic



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

Laboratory Procedures

Sinapyl alcohol is supplied as a solid (stabilized with MEHQ, 0.2% w/w). A stock solution may be made by dissolving the sinapyl alcohol in the solvent of choice, which should be purged with an inert gas. Sinapyl alcohol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of sinapyl alcohol in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of sinapyl alcohol can be prepared by directly dissolving the solid in aqueous buffers. The solubility of sinapyl alcohol in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Sinapyl alcohol is a monolignol and an aglycone form of syringin (Item No. 22387) that has been found in *Populus alba* and has anti-inflammatory and antinociceptive activities.^{1,2} It is a precursor in the biosynthesis of lignin.¹ Sinapyl alcohol (50, 100, and 200 μM) reduces LPS-induced production of nitrite, prostaglandin E₂ (PGE₂; Item No. 14010), and TNF-α in RAW 264.7 cells.² Sinapyl alcohol (20 and 30 mg/kg) inhibits acetic acid-induced writhing and increases the latency to paw licking in the hot plate test in mice.

References

- Shigeto, J., Ueda, Y., Sasaki, S., *et al.* Enzymatic activities for lignin monomer intermediates highlight the biosynthetic pathway of syringyl monomers in *Robinia pseudoacacia*. *J. Plant Res.* **130(1)**, 203-210 (2017).
- Choi, J., Shin, K.-M., Park, H.-J., *et al.* Anti-inflammatory and antinociceptive effects of sinapyl alcohol and its glucoside syringin. *Planta Med.* **70(11)**, 1027-1032 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 06/16/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM