

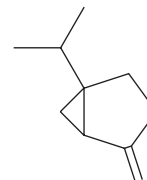
PRODUCT INFORMATION



Sabinene

Item No. 25777

CAS Registry No.: 3387-41-5
Formal Name: 4-methylene-1-(1-methylethyl)-bicyclo[3.1.0]hexane
Synonym: NSC 407278
MF: C₁₀H₁₆
FW: 136.2
Purity: ≥98%
Supplied as: A neat oil
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Sabinene is supplied as a neat oil. A stock solution may be made by dissolving the sabinene in the solvent of choice, which should be purged with an inert gas. Sabinene is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of sabinene in these solvents is approximately 20 mg/ml.

Sabinene is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, sabinene should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Sabinene has a solubility of approximately 0.33 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Sabinene is a bicyclic monoterpene found in a variety of plants, including *Cannabis*, that has antifungal and anti-inflammatory properties.¹⁻³ It inhibits the growth of various fungi *in vitro*, including several species of *Candida*, *Trichophyton*, and *Aspergillus* (MICs = 0.16-5 µl/ml).³ Sabinene (0.32 µl/ml) prevents increases in nitrite production in RAW 264.7 macrophages stimulated by LPS and IFN-γ. It is cytotoxic to RAW 264.7 macrophages and HaCat keratinocytes when used at a concentration of 1.25 µl/ml. Formulations containing sabinene have been used as perfume additives.

References

1. Marchini, M., Charvoz, C., Dujourdy, L., et al. Multidimensional analysis of cannabis volatile constituents: Identification of 5,5-dimethyl-1-vinylbicyclo[2.1.1]hexane as a volatile marker of hashish, the resin of *Cannabis sativa* L. *J. Chromatogr. A*. **1370**, 200-215 (2014).
2. Cao, Y., Zhang, H., Liu, H., et al. Biosynthesis and production of sabinene: Current state and perspectives. *Appl. Microbiol. Biotechnol.* **102(4)**, 1535-1544 (2018).
3. Valente, J., Zuzarte, M., Gonçalves, M.J., et al. Antifungal, antioxidant and anti-inflammatory activities of *Oenanthe crocata* L. essential oil. *Food Chem. Toxicol.* **62**, 349-354 (2013).

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.

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