# PRODUCT INFORMATION



## (-)-Perillyl Alcohol

Item No. 21860

CAS Registry No.: 18457-55-1

Formal Name: 4S-(1-methylethenyl)-1-cyclohexene-1-methanol

Synonyms: (L)-Perillyl Alcohol, (S)-Perillic Alcohol, (S)-(-)-Perillyl Alcohol

MF:  $C_{10}H_{16}O$ FW: 152.2 **Purity:** ≥95% Supplied as: A neat oil 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**

(-)-Perillyl alcohol is supplied as a neat oil. A stock solution may be made by dissolving the (-)-perillyl alcohol in the solvent of choice, which should be purged with an inert gas. (-)-Perillyl alcohol is miscible in organic solvents such as ethanol, DMSO, and dimethyl formamide.

### Description

(-)-Perillyl alcohol is a monoterpene alcohol that has been found in lavender essential oil and has diverse biological activities. 1-4 It reduces production of hydroperoxidienes and thiobarbituric acid reactive substances (TBARS) in vitro in a concentration-dependent manner.<sup>2</sup> (-)-Perillyl alcohol inhibits PANC-1 pancreatic carcinoma cell and H-Ras-transformed fibroblast growth when used at a concentration of  $1 \text{ mM}.^3$ It also inhibits the growth of P. aeruginosa, E. coli, S. aureus, and C. albicans (MICs = 480-2,900 ppm).<sup>4</sup>

#### References

- 1. Gerhäuser, C., Klimo, K., Heiss, E., et al. Mechanism-based in vitro screening of potential cancer chemopreventive agents. Mutat. Res. 523-524, 163-172 (2003).
- 2. Ruberto, G. and Baratta, M.T. Antioxidant activity of selected essential oil components in two lipid model systems. Food Chem. 69(2), 167-174 (2000).
- Karlson, J., Borg-Karlson, A.K., Unelius, R., et al. Inhibition of tumor cell growth by monoterpenes in vitro: Evidence of a Ras-independent mechanism of action. Anticancer Drugs 7(4), 422-429 (1996).
- Griffin, S.G., Wyllie, S.G., Markham, J.L., et al. The role of structure and molecular properties of terpenoids in determining their antimicrobial activity. Flavour Fragr. J. 14(5), 322-332 (1999).

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

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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