# PRODUCT INFORMATION



# α-Copaene

Item No. 25770

CAS Registry No.: 3856-25-5

Formal Name: (1R,2S,6S,7S,8S)-1,3-dimethyl-8-(1-

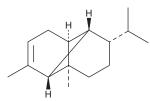
methylethyl)-tricyclo[4.4.0.0<sup>2,7</sup>]dec-3-ene

Synonym: (-)-Copaene MF:  $C_{15}H_{24}$ 204.4 FW: ≥95% **Purity:** Supplied as: An oil Storage: -20°C Stability:

Item Origin: Plant/Angelica oil

≥2 years

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



#### **Laboratory Procedures**

 $\alpha$ -Copaene is supplied as an oil. A stock solution may be made by dissolving the  $\alpha$ -copaene in the solvent of choice, which should be purged with an inert gas. α-Copaene is slightly soluble in chloroform and methanol.

## Description

α-Copaene is a sesquiterpene found in a variety of plants, including Cannabis, that has antiproliferative and antioxidant properties. 1,2 It inhibits proliferation of primary rat neurons and N2a rat neuroblastoma cells in a concentration-dependent manner and cultured human lymphocytes when used at concentrations greater than 100 mg/L. $^{2,3}$   $\alpha$ -Copaene (25 mg/L) increases total antioxidant capacity in primary rat neurons and N2a neuroblastoma cells, as well as cultured human lymphocytes, when used at concentrations of 50 and 100 mg/L.

#### 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. Türkez, H., Çelik, K., and Toğar, B. Effects of copaene, a tricyclic sesquiterpene, on human lymphocytes cells in vitro. Cytotechnology 66(4), 597-603 (2014).
- Turkez, H., Togar, B., Tatar, A., et al. Cytotoxic and cytogenetic effects of α-copaene on rat neuron and N2a neuroblastoma cell lines. Biologia 69(7), 936-942 (2014).

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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