

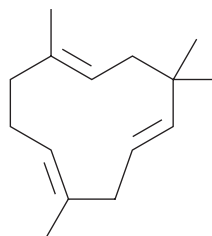
PRODUCT INFORMATION



α -Humulene

Item No. 21574

CAS Registry No.: 6753-98-6
Formal Name: (1E,4E,8E)-2,6,6,9-tetramethyl-1,4,8-cycloundecatriene
Synonyms: α -Caryophyllene, (\pm)- α -Humulene
MF: C₁₅H₂₄
FW: 204.4
Purity: \geq 95%
Supplied as: A neat oil
Storage: -20°C
Stability: \geq 4 years



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

Description

α -Humulene is a sesquiterpene that has been found in *C. sativa*, *C. indica*, and hemp with diverse biological activities.¹⁻⁵ It is lethal to *A. subpictus*, *A. albopictus*, and *C. tritaeniorhynchus* mosquito larvae (LC₅₀s = 6.19, 7.39, and 12.05 mg/ml, respectively).² α -Humulene reduces growth of MCF-7 breast cancer cells by approximately 50% when used at a concentration of 32 mg/ml.³ It also reduces viability of Caco-2 cells in a concentration-dependent manner (IC₅₀ = 24.4 mg/ml) but has no effect on viability of rat hepatocytes.⁴ *In vivo*, α -humulene (50 mg/kg) reduces histamine-induced paw edema in mice as well as carrageenan-induced TNF- α and IL-1 β production and paw edema in mice and rats.⁵ It also reduces carrageenan-induced production of prostaglandin E₂ (PGE₂) and expression of inducible nitric oxide synthase (iNOS) and COX-2 in rats.

References

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3. Legault, J. and Pichette, A. Potentiating effect of β -caryophyllene on anticancer activity of α -humulene, isocaryophyllene and paclitaxel. *J. Pharm. Pharmacol.* **59**(12), 1643-1647 (2007).
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5. Fernandes, E.S., Passos, G.F., Medeiros, R., et al. Anti-inflammatory effects of compounds α -humulene and (-)-*trans*-caryophyllene isolated from the essential oil of *Cordia verbenacea*. *Eur. J. Pharmacol.* **569**(3), 228-236 (2007).

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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