PRODUCT INFORMATION



(+)-ar-Turmerone

Item No. 11759

CAS Registry No.: 532-65-0

Formal Name: 2-methyl-6S-(4-methylphenyl)-2-hepten-4-one

Synonym: (S)-(+)-ar-Turmerone

MF: $C_{15}H_{20}O$ 216.3 FW: **Purity:** ≥95%

Supplied as: A solution in ethanol

Storage: -20°C Stability: ≥1 year

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

Description

(+)-ar-Turmerone is an aromatic compound from the rhizomes of C. longa, a perennial plant of the ginger family, Zingiberaceae, commonly used in traditional Asian medicines. 1 It is also a major constituent of essential oil of turmeric, which is known for its antioxidant, anti-inflammatory, and anti-nociceptive properties.² Two structurally and physiologically distinct forms of turmerone have been isolated from C. longa, (+)-ar-Turmerone and α -turmerone. (+)-ar-Turmerone stimulates the proliferation of peripheral blood mononuclear cells and increases the production of TNF-α, IL-2, and IFN-γ.¹ It also promotes the maturation of dendritic cells and induces the proliferation of neural stem cells both in vitro and in vivo.^{3,4}

References

- 1. Yue, G.G.L., Chan, B.C.L., Hon, P.M., et al. Evaluation of in vitro anti-proliferative and immunomodulatory activities of compounds isolated from Curcuma longa. Food Chem. Toxicol. 48(8-9), 2011-2020 (2010).
- 2. Liju, V.B., Jeena, K., and Kuttan, R. An evaluation of antioxidant, anti-inflammatory, and antinociceptive activities of essential oil from Curcuma longa. L. Indian J. Pharmacol. 43(5), 526-531 (2011).
- 3. Yonggang, T., Yiming, M., Heying, Z., et al. Maturation and upregulation of functions of murine dendritic cells (DCs) under the influence of purified aromatic-turmerone (AR). Hum. Vaccin. Immunother. 8(10), 1416-1424 (2012).
- 4. Hucklenbrioch, J., Klein, R., Neumaier, B., et al. Aromatic-turmerone induces neural stem cell proliferation in vitro and in vivo. Stem Cell Res. Ther. 5(4), 100 (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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