# PRODUCT INFORMATION



## (-)-α-Bisabolol

Item No. 9002495

CAS Registry No.: 23089-26-1

Formal Name:  $(\alpha S, 1S)$ - $\alpha, 4$ -dimethyl- $\alpha$ -(4-methyl-3-

penten-1-yl)-3-cyclohexene-1-methanol

MF:  $C_{15}H_{26}O$ FW: 222.4 **Purity:** ≥90% Supplied as: Storage: -20°C Stability: ≥4 years

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

# A neat oil

#### **Laboratory Procedures**

(-)-α-Bisabolol is supplied as a neat oil. A stock solution may be made by dissolving the (-)-α-bisabolol in the solvent of choice, which should be purged with an inert gas. (-)- $\alpha$ -Bisabolol is soluble in the organic solvent ethanol.

#### Description

(-)- $\alpha$ -Bisabolol is a sesquiterpene alcohol that has been found in the essential oils of several aromatic plants, including C. sativa, C. indica, and C. sativa/C. indica hybrid strains, with diverse biological activities. 1-5 It inhibits the growth of *L. amazonensis* promastigotes and amastigotes ( $IC_{50}$ s = 8.07 and 4.29 µg/ml, respectively).<sup>2</sup> It also reduces the growth of L. infantum and L. donovani amastigotes (IC<sub>50</sub>s = 56.9 and 39.4  $\mu$ M, respectively) with a cytotoxic concentration (CC<sub>50</sub>) value of greater than 1,000  $\mu$ M in L929 cells.<sup>3</sup> In vivo, (–)- $\alpha$ -bisabolol (200 mg/kg) reduces parasite load in the liver and spleen in a mouse model of visceral leishmaniasis. (-)-α-Bisabolol (200 mg/kg) reduces the size of ethanol-induced lesions, decreases malondialdehyde (MDA) production, and increases superoxide dismutase (SOD) activity in gastric mucosa in mice.<sup>4</sup> It also decreases serotonin-, carrageenan-, and dextran-, but not histamine-, induced paw edema as well as acetic-acid induced writhing and paw-licking time in the formalin test in mice, indicating anti-inflammatory and antinociceptive activity.5

#### References

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- 2. Rottini, M.M., Amaral, A.C., Ferreira, J.L., et al. In vitro evaluation of (-)α-bisabolol as a promising agent against Leishmania amazonensis. Exp. Parasitol. 148, 66-72 (2015).
- Corpas-López, V., Morillas-Márquez, F., Navarro-Moll, M.C., et al. (-)-α-Bisabolol, a promising oral compound for the treatment of visceral leishmaniasis. J. Nat. Prod. 78(6), 1202-1207 (2015).
- Rocha, N.F., Oliverira, G.V., Araújo, F.Y., et al. (-)-α-Bisabolol-induced gastroprotection is associated with reduction in lipid peroxidation, superoxide dismutase activity and neutrophil migration. Eur. J. Pharm. Sci. 44(4), 455-461 (2011).
- 5. Rocha, N.F., Rios, E.R., Carvalho, A.M., et al. Anti-nociceptive and anti-inflammatory activities of (-)-α-bisabolol in rodents. Naunyn Schmiedebergs Arch. Pharmacol. 384(6), 525-533 (2011).

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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