

Product Data Sheet

Product Name: (-)-Caryophyllene oxide

Cat. No.: GC45245

Chemical Properties

Cas. No. 1139-30-6

SMILES CC(C1)(C)[C@@]2([H])[C@@]1([H])C(CC[C@@H]3[C@](C)(O3)CC2)=C

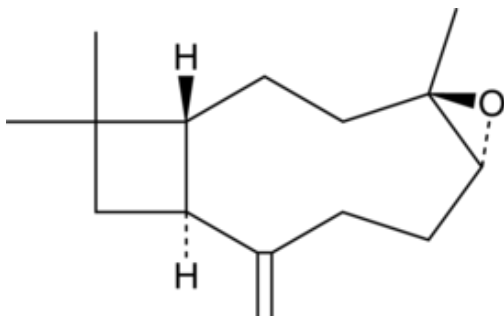
Formula $C_{15}H_{24}O$ M.Wt 220.4

Solubility DMF: 20 mg/ml, DMSO: 10 mg/ml, Ethanol: 30 mg/ml, Ethanol:PBS (pH 7.2) (1:3): 0.25 mg/ml
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

(-)-Caryophyllene oxide is a bicyclic sesquiterpene and a metabolite of β -caryophyllene that has been found in *C. sativa* and has anticancer properties. Unlike β -caryophyllene, (-)-caryophyllene oxide does not bind to the cannabinoid (CB) receptor CB2 ($K_i = >20 \mu M$). It induces calcium currents in HL-60 cells expressing CB2 receptors but also does so in CB2-deficient cells. (-)-Caryophyllene oxide is cytotoxic to HepG2, AGS, HeLa, SNU-1 and SNU-16 cells (IC_{50} s = 3.95, 12.6, 13.55, 16.79, and 27.39 μM , respectively). It is the volatile component of *C. sativa* sensed by narcotic detection dogs. Formulations containing (-)-caryophyllene have been used as flavoring agents.

Caution: Product has not been fully validated for medical applications. For research use only.

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