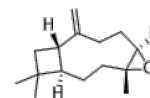


Product Name : Caryophyllene oxide
Cat. No. : PC-28082
CAS No. : 1139-30-6
Molecular Formula : C₁₅H₂₄O
Molecular Weight : 220.36
Target : P-glycoprotein (P-gp)
Solubility : 10 mM in DMSO



Biological Activity

Caryophyllene oxide (β-caryophyllene oxide, beta-caryophyllene oxide) is a naturally occurring sesquiterpene component of many essential oils, acts as a chemosensitizer in hepatocellular carcinoma by inhibiting **ABCB1**, **MRP1**, and **MRP2**. Caryophyllene oxide induces apoptosis and inhibits proliferation of A549 lung cancer cells. Caryophyllene oxide markedly reduced BCRP-induced resistance to known substrate drugs (mitoxantrone and SN-38) and cisplatin, gemcitabine, sorafenib, and 5-FU but not oxaliplatin. Caryophyllene oxide exhibits insecticidal, antioxidant, antimicrobial, antifungal, and antiparasitic properties.

References

- Sain S, et al. *Antiinflamm Antiallergy Agents Med Chem*. 2014 Mar;13(1):45-55.
Ortiz-Rivero S, et al. *Biomed Pharmacother*. 2024 Jan;170:116038.
Ramírez-Santos J, et al. *Int J Mol Sci*. 2024 Dec 12;25(24):13355.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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