



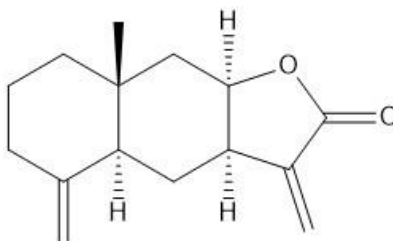
Catalog # 10-5393

Isohelenin

CAS# 470-17-7

(3aR,8aR,9aR)-8a-methyl-3,5-dimethylenedecahydronaphtho[2,3-b]furan-2(3H)-one

Lot # X109235



A sesquiterpene lactone isolated from Mexican Indian medicinal plants known to have anti-inflammatory properties. A potent inhibitor of NF κ B (complete inhibition at 5 μ M)¹ acting via inhibition of IKK β ⁶. Isohelenin-mediated NF κ B inhibition suppresses IL-8 expression², iNOS expression³ and RANTES biosynthesis⁴. Displays protective effects in endotoxic shock in rodent models.⁵ Induces apoptosis in glioma cells.⁶

- 1) Bork et al. (1997), *Sesquiterpene lactone containing Mexican Indian medicinal plants and pure sesquiterpene lactones as potent inhibitors of transcription factor NK-kappaB*; FEBS Lett., **402** 85
- 2) Mazor et al. (2000), *Sesquiterpene lactones are potent inhibitors of interleukin 8 gene expression in cultured human respiratory epithelium*; Cytokine, **12** 239
- 3) Wong and Menendez (1999), *Sesquiterpene lactones inhibit inducible nitric oxide synthase gene expression in cultured rat aortic smooth muscle cells*; Biochem. Biophys. Res. Commun., **262** 375
- 4) Li et al. (2001), *Induction of RANTES chemokine expression in human astrocytic cells is dependent upon activation of NK-kappaB transcription factor*; Int. J. Mol. Med., **7** 527
- 5) Sheehan et al. (2002), *Protective effects of isohelenin, an inhibitor of nuclear factor KappaB in endotoxic shock in rats*; J. Endotoxin Res, **8** 99
- 6) Xing et al. (2019), *Isoalantolactone inhibits IKK β kinase activity to interrupt the NF-kB/COX-2-mediated signaling cascade and induces apoptosis regulated by the mitochondrial translocation of cofilin in glioblastoma*; Cancer Med., **8** 1655

PHYSICAL DATA

Molecular Weight: 232.32
Molecular Formula: C₁₅H₂₀O₂
Purity: 98% by TLC
NMR: (Conforms)
Solubility: DMSO (up to 50 mg/ml) or Ethanol (30 mg/ml)
Physical Description: White solid
Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase.
Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.