

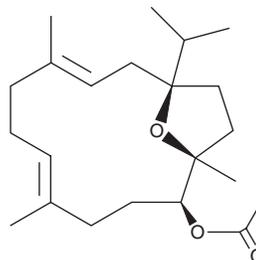
# PRODUCT INFORMATION



## Incensole Acetate

Item No. 34614

**CAS Registry No.:** 34701-53-6  
**Formal Name:** (1R,2S,5E,9E,12S)-1,5,9-trimethyl-12-(1-methylethyl)-2-acetate, 15-oxabicyclo[10.2.1]pentadeca-5,9-dien-2-ol  
**Synonym:** Incensole Acetate  
**MF:** C<sub>22</sub>H<sub>36</sub>O<sub>3</sub>  
**FW:** 348.5  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years  
**Item Origin:** Plant/Unspecified sp.



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

### Laboratory Procedures

Incensole acetate is supplied as a solid. A stock solution may be made by dissolving the incensole acetate in the solvent of choice, which should be purged with an inert gas. Incensole acetate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of incensole acetate in these solvents is approximately 25 mg/ml.

Incensole acetate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, incensole acetate should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Incensole acetate has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Incensole acetate is a diterpene originally isolated from frankincense produced by *B. carterii* that has diverse biological activities.<sup>1-3</sup> It is an activator of transient receptor potential vanilloid 3 (TRPV3) that induces calcium influx in HEK293 cells expressing TRPV3 (EC<sub>50</sub> = 16 μM).<sup>2</sup> Incensole acetate (60-140 μM) inhibits degradation of inhibitor of NF-κB (IκBα) in TNF-α-stimulated HeLa cells.<sup>1</sup> It reduces apoptosis, increases in malondialdehyde (MDA) levels, and the production of reactive oxygen species (ROS) induced by amyloid-β (25-35) peptide (Item No. 24155) in human olfactory bulb neural stem cells (hOBNSCs).<sup>3</sup> Incensole acetate (50 mg/kg) reduces paw edema in mice in a model of hind paw inflammation induced by carrageenan.<sup>1</sup> It also increases the time spent in the open arms of the elevated plus maze and reduces immobility in the forced swim test, indicating anxiolytic and antidepressant-like activity, respectively.<sup>2</sup>

### References

1. Moussaieff, A.S., Shohami, E., Kashman, Y., *et al.* Incensole acetate, a novel anti-inflammatory compound isolated from *Boswellia* resin, inhibits nuclear factor-κB activation. *Mol. Pharmacol.* **72**(6), 1657-1664 (2007).
2. Moussaieff, A., Rimmerman, N., Bregman, T., *et al.* Incensole acetate, an incense component, elicits psychoactivity by activating TRPV3 channels in the brain. *FASEB J.* **22**(8), 3024-3034 (2008).
3. El-Magd, M.A., Khalifa, S.F., Alzahrani, F.A., *et al.* Incensole acetate prevents beta-amyloid-induced neurotoxicity in human olfactory bulb neural stem cells. *Biomed. Pharmacother.* **105**, 813-823 (2018).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

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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