



## Product Information

**Product ID** N176498

**CAS No.** 351416-47-2

**Chemical Name** (1R,5R,7S)-5-benzoyl-2-hydroxy-6,6-dimethyl-1,3,7-tris(3-methylbut-2-enyl)bicyclo[3.3.1]non-2-ene-4,9-dione

**Synonym** Memorosone, 1-Benzoyl-3,5,7-tri-(3-methyl-2-butenyl)-4-hydroxy-8-dimethyl-bicyclo[3.3.1]-3-nonene-2,9-dione, 1-Benzoyl-4-hydroxy-8,8-dimethyl-3,5,7-tris-(3-methyl-but-2-enyl)-bicyclo[3.3.1]non-3-ene-2,9-dione, 1-benzoyl-4-hydroxy-8,8-dimethyl-3,5,7-tris(3-methyl-2-

**Formula** C<sub>33</sub>H<sub>42</sub>O<sub>4</sub>

**Formula Wt.** 502.70

**Melting Point** 66-68 °C

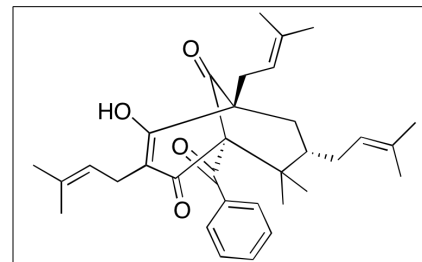
**Purity** ≥99%

**Solubility**

**Store Temp** -20 °C

**Ship Temp** Ambient

**Description** Nemorosone is one of the main bioactive compounds found in propolis produced by honey bees. Nemorosone is structurally related to hyperforin, but unlike hyperforin, nemorosone does not induce CYP3A4, making nemorosone the more viable option to develop a combination therapy targeting pancreatic cancer. In addition, nemorosone was found to inhibit growth, induce cell cycle arrest, abolish mitochondrial membrane potential, and elevate cytosolic calcium concentration in pancreatic cancer cells, and induce cytochrome c release and caspase-dependent apoptosis in cancer cells but not in fibroblasts. Furthermore, nemorosone has been shown to inhibit 17-beta-estradiol action, indicating that it may have potential therapeutic application to breast cancer.



## Pricing and Availability

**Bulk quantities available upon request**

Product ID	Size	List Price
N176498	1 mg	\$40.50
N176498	5 mg	\$133.10
N176498	25 mg	\$405.20
N176498	100 mg	\$1134.50

**References** da Cunha MG, Rosalen PL, Franchin M, et al. Antiproliferative constituents of geopropolis from the bee *Melipona scutellaris*. *Planta Med.* 2016 Feb;82(3):190-194. PMID: 26544117.

Wolf RJ, Hilger RA, Hoheisel JD, et al. In vivo activity and pharmacokinetics of nemorosone in pancreatic cancer xenografts. *PLoS One.* 2013 Sep 5;8(9):e74555. PMID: 24040280.

Holtrup F, Bauer A, Fellenberg K, et al. Microarray analysis of nemorosone-induced cytotoxic effects on pancreatic cancer cells reveals activation of the unfolded protein response (UPR). *Br J Pharmacol.* 2011 Mar;162(5):1045-1059. PMID: 21091652.

Camargo MS, Prieto AM, Resende FA, et al. Evaluation of estrogenic, antiestrogenic and genotoxic activity of nemorosone, the major compound found in brown Cuban propolis. *BMC Complement Altern Med.* 2013 Jul 31;13:201. PMID: 23902919.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.