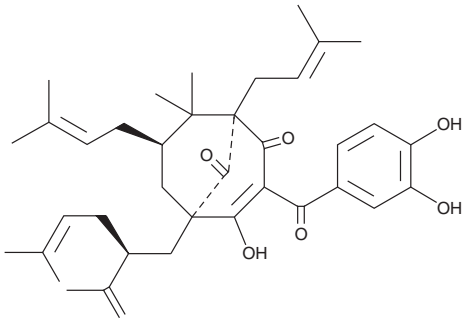
PRODUCT INFORMATION

Garcinol (solution)

Item No. 46796

CAS Registry No.: 78824-30-3
Formal Name: (1R,5R,7R)-3-(3,4-dihydroxybenzoyl)-4-hydroxy-8,8-dimethyl-1,7-*bis*(3-methyl-2-buten-1-yl)-5-[(2S)-5-methyl-2-(1-methylethenyl)-4-hexen-1-yl]-bicyclo[3.3.1]non-3-ene-2,9-dione
Synonyms: Camboginol, Guttiferone F
MF: $C_{30}H_{50}O_6$
FW: 602.8
Purity: ≥95%
Supplied as: A 1 mM solution in DMSO
Storage: -20°C
Stability: ≥2 years
Item Origin: Extraction from plant material



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

Laboratory Procedures

Garcinol (solution) is supplied as a solution in DMSO. To change the solvent, simply evaporate the DMSO under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol and dimethyl formamide (DMF) purged with an inert gas can be used. Garcinol (solution) is soluble (≥10 mg/ml) in ethanol and DMF.

Description

Garcinol is a polyisoprenylated benzophenone that has been found in *G. indica* and has diverse biological activities.[1-5] It inhibits the histone acetyltransferases (HATs) p300 and p300/CREB-binding protein-associated factor (PCAF; IC_{50}s = ~7 and ~5 µM, respectively), as well as COX-1, microsomal prostaglandin E_2 synthase-1 (mPGES-1) and 5-lipoxygenase (5-LO; IC_{50}s = 12, 0.1, and 0.3 µM, respectively).[1,2] Garcinol (0.8 µM) is active against the fungus *C. neoformans in vitro*.[3] It scavenges hydroxyl radicals and superoxide anions in cell-free assays.[4] Garcinol (5 µM) induces neurite outgrowth of primary embryonic rat neural progenitor cells.[5] It reduces ulcer area in rat models of gastric ulcers induced by water immersion stress or indomethacin (Item No. 70270) when administered at a dose of 200 mg/kg.[4]

References

1. Balasubramanyam, K., Altaf, M., Varier, R.A., *et al. J. Biol. Chem.* **279(32)**, 33716-33726 (2004).
2. Koeberle, A., Northoff, H., and Werz, O. *Biochem. Pharmacol.* **77(9)**, 1513-1521 (2009).
3. O'Meara, T.R., Hay, C., Price, M.S., *et al. Eukaryot. Cell* **9(8)**, 1193-1202 (2010).
4. Yamaguchi, F., Saito, M., Ariga, T., *et al. J. Agric. Food Chem.* **48(6)**, 2320-2325 (2000).
5. Weng, M.-S., Liao, C.-H., Yu, S.-Y., *et al. J. Agric. Food Chem.* **59(3)**, 1031-1040 (2011).

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.

WARRANTY AND LIMITATION OF REMEDY
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