



Data Sheet

Research Use Only

Compound Name

Garcinol

Catalog Number

SM52

Alternative Names

Camboginol, (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

Activity

Garcinol is a polyisoprenylated benzophenone derivative from the rind of *Garcinia indica* fruit and is a potent inhibitor of histone acetyltransferases p300 and PCAF *in vitro*. p300, also known as E1A binding protein p300, regulates cell growth and division through interacting with numerous transcription factors, and the p53 associated transcriptional coactivator PCAF (P300/CBP-associated factor) plays a direct role in transcriptional regulation.

Effect

Garcinol predominantly down-regulates global gene expression in HeLa cells. Additional research shows that Garcinol exhibits anti-carcinogenic and anti-inflammatory properties through selectively suppressing Prostaglandin E2 synthesis and 5-lipoxygenase product formation. It promotes neurogenesis in cortical progenitor cells and contributes for *ex vivo* expansion of human hematopoietic stem cells (hHSC).

Purity

>98%

CAS

78824-30-3

Formula

 $C_{38}H_{50}O_6$

Molecular Weight

602.80

Solubility

DMSO, ethanol

Stability

Stable at -20 °C. Keep away from direct sunlight.

References

1. Nishino, T., et al. 2011. PLoS One. 6(9): e24298. PMID: 21931675
2. Weng, MS., et al. 2011. J Agric Food Chem. 59(3): 1031-1040. PMID: 21214247