



LKT Laboratories, Inc.

Gambogic Acid

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Product Information

Product ID G0248

CAS No. 2752-65-0

Chemical Name

Synonym beta-Guttiferin, Cambogic acid, Guttic acid, Guttatic acid, beta-Guttillactone

Formula C₃₈H₄₄O₈

Formula Wt. 628.75

Melting Point 97.5 °C

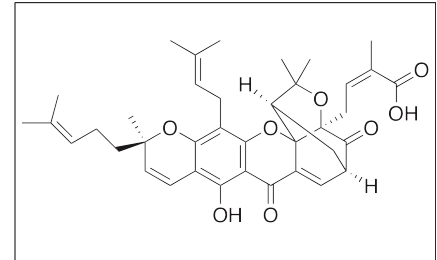
Purity ≥98%

Solubility Insoluble in water, soluble in DMSO (25 mg/mL), and ethanol (25 mg/mL).

Store Temp -20 °C

Ship Temp ambient

Description Gambogic acid is a xanthone found in the resin of the *Garcinia hanburyi* tree and has shown considerable anticancer chemotherapeutic, chemopreventive, and anti-angiogenic activities in both in vitro and in vivo studies. Gambogic acid inhibits cellular growth and induces apoptosis through a variety of mechanisms. This compound induces LRIG1 upregulation and EGFR degradation to inactivate Akt signaling. Additionally, gambogic acid also inhibits NF-κB signaling through interaction with the transferrin receptor, causing reduction of c-MYC expression, inhibition of telomerase activity and mRNA production, and disruption of mitochondrial outer membrane potential.



Bulk quantities available upon request

Product ID	Size
G0248	5 mg
G0248	25 mg
G0248	100 mg

- References** He XY, Liu XJ, Chen X, et al. Gambogic acid induces EGFR degradation and Akt/mTORC1 inhibition through AMPK dependent-LRIG1 upregulation in cultured U87 glioma cells. *Biochem Biophys Res Commun.* 2013 Jun 7;435(3):397-402. PMID: 23665322.
- Gu H, Rao S, Zhao J, et al. Gambogic acid reduced bcl-2 expression via p53 in human breast MCF-7 cancer cells. *J Cancer Res Clin Oncol.* 2009 Dec;135(12):1777-82. PMID: 19582475.
- Nie F, Zhang X, Qi Q, et al. Reactive oxygen species accumulation contributes to gambogic acid-induced apoptosis in human hepatoma SMMC-7721 cells. *Toxicology.* 2009 Jun 16;260(1-3):60-7. PMID: 19464570.
- Pandey MK, Sung B, Ahn KS, et al. Gambogic acid, a novel ligand for transferrin receptor, potentiates TNF-induced apoptosis through modulation of the nuclear factor-kappaB signaling pathway. *Blood.* 2007 Nov 15;110(10):3517-25. PMID: 17673602.
- Wu ZQ, Guo QL, You QD, et al. Gambogic acid inhibits proliferation of human lung carcinoma SPC-A1 cells in vivo and in vitro and represses telomerase activity and telomerase reverse transcriptase mRNA expression in the cells. *Biol Pharm Bull.* 2004 Nov;27(11):1769-74. PMID: 15516720.

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