



LKT Laboratories, Inc.

Theaflavin-3,3'-digallate

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Product Information

Product ID T286163

CAS No. 30462-35-2

Chemical Name

Synonym Theaflavin digallate

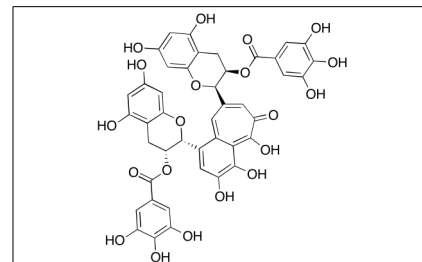
Formula C₄₃H₃₂O₂₀

Formula Wt. 868.71

Melting Point 226-230°C dec

Purity ≥98%

Solubility 0.1 mg/mL water.



Bulk quantities available upon request

Product ID	Size
T286163	1 mg
T286163	5 mg

Store Temp 4°C

Ship Temp Ambient

Description Theaflavin-3,3'-digallate is a polyphenolic compound found in black tea. The theaflavins are formed during the enzymatic oxidation of catechins, which happens during processing of the fresh tea leaves. Theaflavin-3,3'-digallate has also shown inhibitory effects on ovarian cancer cells OVCAR-3 and A2780/CP70 by inducing apoptosis and impairing tumor angiogenesis. In addition, theaflavin-3,3'-digallate was found to produce notably efficient reactive oxygen species scavenging activity by a chemiluminescence assay. Theaflavin-3,3'-digallate was also shown to produce chemopreventive effects through the inhibition of the EGFR signaling pathway as a result of EGFR down-regulation.

References Gao Y, Rankin GO, Tu Y, et al. Inhibitory effects of the four main theaflavin derivatives found in black tea on ovarian cancer cells. *Anticancer Res.* 2016 Feb;36(2):643-651. PMID: 26851019.

Wu YY, Li W, Xu Y, et al. Evaluation of the antioxidant effects of four main theaflavin derivatives through chemiluminescence and DNA damage analyses. *J Zhejiang Univ Sci B.* 2011 Sep;12(9):744-751. PMID: 21887850.

Mizuno H, Cho YY, Zhu F, et al. Theaflavin-3,3'-digallate induces epidermal growth factor receptor downregulation. *Mol Carcinog.* 2006 Mar;45(3):204-212. PMID: 16353237.

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