



Product Information

Product ID T286165

CAS No. 30462-34-1

Chemical Name

Synonym

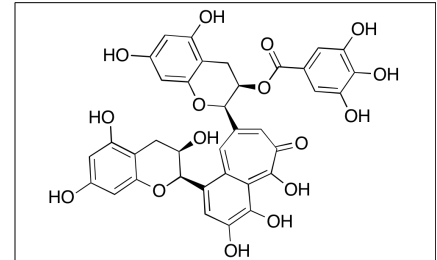
Formula $C_{36}H_{28}O_{16}$

Formula Wt. 716.60

Melting Point

Purity $\geq 95\%$

Solubility



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
T286165	1 mg	\$121.30
T286165	5 mg	\$496.10

Store Temp 4°C

Ship Temp Ambient

Description Theaflavin-3-gallate 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-gallate has been shown to have inhibitory effects on ovarian cancer cells OVCAR-3 and A2780/CP70 by inducing apoptosis and impairing tumor angiogenesis. In addition, theaflavin-3-gallate was found to give stronger reactive oxygen species scavenging activity than theaflavin by a chemiluminescence assay. Exposure of CAL27 and HSC-2 carcinoma cells to theaflavin-3-gallate demonstrated cytotoxic and antiproliferative properties of the compound.

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.

Babich H, Gottesman RT, Liebling EJ, et al. Theaflavin-3-gallate and theaflavin-3'-gallate, polyphenols in black tea with prooxidant properties. *Basic Clin Pharmacol Toxicol.* 2008 Jul;103(1):66-74. PMID: 18346048.

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