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Product Information

Product ID E6233 CAS No. 970-74-1

Chemical Name

Synonym (-)-3,3',4',5,5',7-Flavanhexol, Epigallocatechin,

Epigallocatechol

Formula C₁₅H₁₄O₇ Formula Wt. 306.27 Melting Point 208-210°C Purity ≥98%

Solubility Soluble in water or alcohol.

OH OH HO OH OH OH

Bulk quanitites available upon request

Product ID Size E6233 1 mg E6233 5 mg

Store Temp 4°C Ship Temp Ambient

Description (-)-Epigallocatechin (EGC) is a flavanol/catechin originally found in *Camilla* and other plant sources; it exhibits antioxidative, neuromodulatory, antithrombotic/anticoagulant, anticancer, anti-metastatic, and anti-osteoporotic activities. EGC displays agonist activity at cannabinoid 1 (CB1) receptors. In vivo, EGC inhibits platelet aggregation and increases activated partial thromboplastin time. Additionally, EGC inhibits expression of FLT3 and decreases phosphorylation of p38 MAPK, Akt, and STAT5 in acute myelogenous leukemia (AML) cells, suppressing cell proliferation. In breast cancer cells, EGC inhibits cell migration and invasion. This compound also decreases adipocyte formation, suppresses expression of PPARy, CEBP, and FABP4, and increases osteogenic differentiation in vitro.

References Chen XQ, Wang XB, Guan RF, et al. Blood anticoagulation and antiplatelet activity of green tea (-)-epigallocatechin (EGC) in mice. Food Funct. 2013 Oct;4(10):1521-5. PMID: 24056410.

> Ly BT, Chi HT, Yamagishi M, et al. Inhibition of FLT3 expression by green tea catechins in FLT3 mutated-AML cells. PLoS One. 2013 Jun 20;8(6):e66378. PMID: 23840454.

Ko CH, Siu WS, Wong HL, et al. Pro-bone and antifat effects of green tea and its polyphenol, epigallocatechin, in rat mesenchymal stem cells in vitro. J Agric Food Chem. 2011 Sep 28;59(18):9870-6. PMID: 21877759.

Korte G, Dreiseitel A, Schreier P, et al. Tea catechins' affinity for human cannabinoid receptors. Phytomedicine. 2010 Jan;17 (1):19-22. PMID: 19897346.

Kushima Y, Iida K, Nagaoka Y, et al. Inhibitory effect of (-)-epigallocatechin and (-)-epigallocatechin gallate against heregulin beta1-induced migration/invasion of the MCF-7 breast carcinoma cell line. Biol Pharm Bull. 2009 May;32(5):899-904. PMID: 19420761.

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