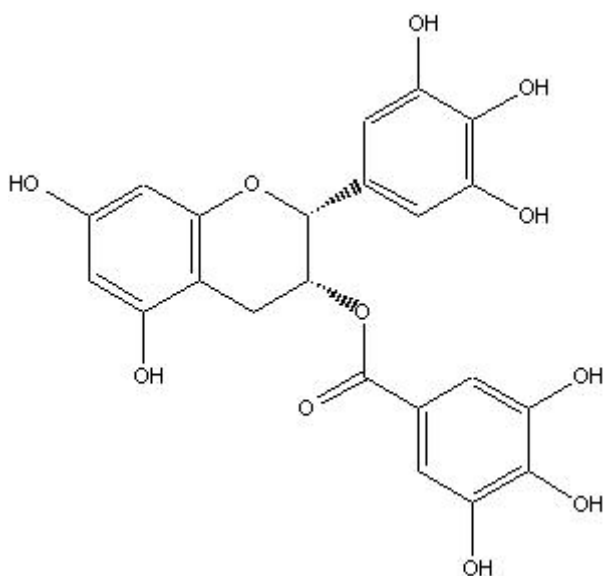


TECHNICAL INFORMATION

Catalog Number: 199165
(-)-Epigallocatechin Gallate

Structure:



Molecular Formula: C₂₂H₁₈O₁₁

Molecular Weight: 458.4

CAS # 989-51-5

Synonyms: (2R,3R)-2-(3,4,5-Trihydroxyphenyl)- 3,4-dihydro- 1(2H)- benzopyran-3,5,7- triol 3-(3,4,5-trihydroxybenzoate); (-)-Epigallocatechin 3-O-gallate; EGCG

Physical Description: Light pink to peach colored solid

Solubility: Soluble in water (5 mg/ml - clear, faint pink colored solution). Stable in solution at 2-8°C at neutral to slightly acidic pH.

Description: A polyphenolic, tumor-inhibiting constituent of green tea (an antioxidant). At uM concentrations, it inhibits VEGF-induced tyrosine phosphorylation. Inhibits cellular oxidation of low density lipoproteins. Readily detected in human and rat plasma at ng/ml levels following oral ingestion. Inhibits the peroxynitrite-induced formation of the oxidative injury markers 8-hydroxy-2-deoxy guanosine and 3-nitrotyrosine. Induces apoptosis in human prostate cancer cells. Selectively inhibits activation of JNK/SAPK signaling pathway and suppresses proliferation of vascular smooth muscle cells. Shows growth inhibitory effects on tumor cells but not their normal counterparts. Inhibits telomerase. A fast-binding and reversible fatty acid synthase inhibitor. Inhibits PMA-induced skin thickening. Inhibits activation of interleukin-1alpha mRNA and protein expression. Inhibits nitric oxide synthase (iNOS) gene expression.

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