(-)-Epigallocatechin gallate (EGCG) ≥ 99%

BC1001

Storage

Store at or below -20°C.

Contents

- Product Manual
- (-)-Epigallocatechin gallate (EGCG) ≥ 99%

Shipping Condition

Ship with ice pack.

Introduction

(-)-Epigallocatechin gallate (EGCG), the major catechin accounting for 59% of the total catechins in green tea, is a powerful antioxidant as well as an antiangiogenic and antitumor agent. EGCG has been studied for its role in the chemoprevention of a wild range of cancers, including liver, stomach, skin, lung, mammary gland and colon cancers. Study results show that EGCG is able to induce apoptosis, promote cell growth arrest and block carcinogenesis by affecting signal transduction pathways. Moreover, EGCG exhibits inhibition against a variety of viruses, including HCV, HIV-1, HBV, HSV-1, HSV-2, EBV, adenovirus, influenza virus and enterovirus, as well as several enzymes, including DNMTs, proteases and DHFR.

Chemical Properties

Apperance	Solid
Cas No	989-51-5
Molecular Weight	458.37
Formula	$C_{22}H_{18}N_{11}$
Synonyms	EGCG
Solubility	22 mg/mL in DMSO 5 mg/ml in Ethnaol with ultrasonic 10 mg/ ml in Water with ultrasonic

Biological Activity

In Vitro

Description	EGCG is a β -secretase (BACE1) inhibitor
Target	PKC
IC_{50}	100 nM

In Vivo

Description	(-)-Epigallocatechin Gallate (Intragastrical administration, 5-20 mg/kg, once daily for 14 days, orthotopic transplant model) decreases tumors growth. (-)-Epigallocatechin Gallate (Injected into the mouse lower gingiva, a single dose of 0.5 mg/mouse, experimental periodontitis model) decreases inhibits the LPS-induced loss of bone mineral density (BMD).
Animal Model	Orthotopic transplant BALB/c nude mice model
Dosage	5, 10, and 20 mg/kg, once daily for 14 days.
Administration	Intragastrical administration.

Preparing Stock Solution

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.1816 mL	10.9082 mL	21.8164 mL
5 mM	0.4363 mL	2.1816 mL	4.3633 mL
10 mM	0.2182 mL	1.0908 mL	2.1816 mL

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