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Basic Study

Epigallocatechin gallate inhibits dimethyl hydrazine-induced colorectal cancer in rats

Wang Y *et al.* EGCG inhibits DMH-induced CRC

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Abstract

BACKGROUND

Epigallocatechin gallate (EGCG) is a polyhydroxy phenolic compound extracted from tea and its antitumor effect has received widespread attention. We explored the inhibitory effect of EGCG on dimethylhydrazine (DMH)-induced colorectal cancer (CRC) using a rat models predicted the intersection

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The Inhibitory Effect of (-)-Epigallocatechin-3-Gallate on ...

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Aug 09, 2019 · Mounting evidence has shown that (-)-**epigallocatechin-3-gallate (EGCG)**, the major chemical ingredient of **green tea**, can prevent carcinogenesis by **inducing cancer cell apoptosis** or arresting the cell cycle.

Cited by: 1**Author:** Jie Sheng, Weilin Shi, Hui Guo, Wenlin ...**Publish Year:** 2019

Green Tea Polyphenol Epigallocatechin 3-Gallate ...

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Green tea has been found to reactivate genes in **carcinogen-induced rodent** models of **colon cancer**, which ultimately led to the suppression of **intestinal tumorigenesis** (25). The most active compound in **green tea**, **epigallocatechin gallate (EGCG)** **induces** cell cycle arrest and apoptosis of **cancer** cells (1, 23).

Cited by: 70**Author:** Vondina R. Moseley, James Larry Morr...**Publish Year:** 2013

Epigallocatechin Gallate - an overview | ScienceDirect Topics

<https://www.sciencedirect.com/.../epigallocatechin-gallate>

The natural bioactive polyphenol **epigallocatechin gallate (EGCG)** has been shown to enhance the efficacy of cisplatin by both NSCLC cell lines [135–137], while a combination of **EGCG** and sulforaphane, or EGCG and curcumin enhanced cisplatin mediated responses in **ovarian cancer** cell lines [138,139]. **EGCG** is a compound which can **inhibit** DNA methyltransferases, sulforaphane **inhibits HDACs**, and **curcumin** can **inhibit KATs**.

Epigallocatechin gallate inhibits dimethylhydrazine-induc



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Alternatively, **1-methyl-tryptophan**, an **IDO inhibitor**, effectively suppresses chemically **induced colorectal carcinogenesis** in **rats** . These studies suggest that targeting IDO and regulating **tryptophan catabolism** may be effective strategies for the treatment of certain types of human malignancies, including CRC (6).

Cited by: 29

Author: Kengo Ogawa, Takeshi Hara, Masahito S...

Publish Year: 2012

[Epigallocatechin gallate inhibits growth and activation of ...](#)

<https://www.sciencedirect.com/science/article/pii/S0009279710001997>

(-)-**Epigallocatechin gallate (EGCG)**, the major constituent of **green tea**, **inhibits** the growth of **colorectal cancer** cells by inhibiting the activation of various types of receptor tyrosine kinases (RTKs). The RTK **vascular endothelial growth factor (VEGF)/VEGF receptor (VEGFR) axis induces tumor angiogenesis** in **colorectal cancer**.

Cited by: 102

Author: Masahito Shimizu, Yohei Shirakami, Hiro...

Publish Year: 2010

[Protective Effects of Epigallocatechin Gallate on Colon](#)