

# Ethyl gallate

Catalog No: tcsc0009060



## Available Sizes

Size: 100g

Size: 500g

Size: 1000g



## Specifications

**CAS No:**

831-61-8

**Formula:**

$C_9H_{10}O_5$

**Pathway:**

Others

**Target:**

Others

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 150 mg/mL (756.93 mM; Need ultrasonic)

**Observed Molecular Weight:**

198.17

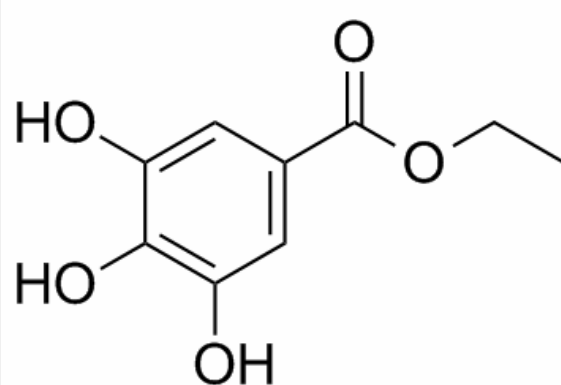
## Product Description

Ethyl gallate is a nonflavonoid phenolic compound and also a scavenger of hydrogen peroxide.

**In Vitro:** Ethyl gallate is a nonflavonoid phenolic compound and also a scavenger of hydrogen peroxide. After treatment for 24 h or

48 h with Ethyl gallate, HL-60 cells show changes in morphology, including shrinkage of the cell membrane and the development of apoptotic bodies. Consistent with these effects, the viability of Ethyl gallate-treated cells decreases in a time- and dose-dependent manner, demonstrating that Ethyl gallate has a cytotoxic effect on HL-60 cells. Ethyl gallate treatment increases the proportion of cells in subG1 phase in a concentration- and time-dependent manner. Treatment of cells for 24 h or 48 h with 50  $\mu$ M or 75  $\mu$ M Ethyl gallate increases the percentage of cells in the subG1 phase from a baseline of 2.9% to 26.5% or 52.6%, respectively. It is found that Ethyl gallate treatment of HL-60 cells decreases the expression of Bcl-2 at 75  $\mu$ M Ethyl gallate, and increases Bax and truncated Bid (tBid) expression at 24 h<sup>[1]</sup>.

**In Vivo:** No significant difference in the serum total protein, albumin, globulin and glucose is found between the rats fed with *A. nilotica* (L.) leaf extract on ethyl gallate equivalent basis and those fed with Ethyl gallate alone. Significant differences in total bilirubin level, however, exist between the rats that receive *A. nilotica* (L.) leaf extract, 500 mg/kg body weight (ethyl gallate equivalent of 10 mg/kg,  $0.34 \pm 0.01$  mg/dL) and those receiving 10 mg/kg body weight of Ethyl gallate ( $0.26 \pm 0.01$  mg/dL). Significant difference is found for ALT between groups fed with 500 and 1000 mg/kg body weight of *A. nilotica* (L.) leaf extract ( $26.52 \pm 1.23$  and  $30.05 \pm 1.38$  U/L) and 10 and 20 mg/kg of Ethyl gallate ( $20.50 \pm 0.94$  and  $24.67 \pm 1.13$  U/L)<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!