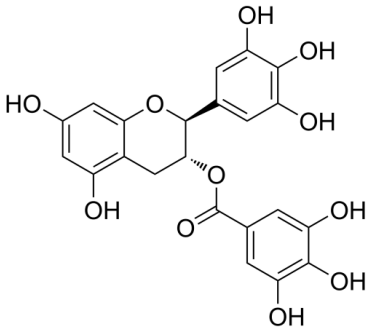
Data Sheet

Product Name:	(-)-Gallocatechin gallate
Cat. No.:	CS-7698
CAS No.:	4233-96-9
Molecular Formula:	$C_{22}H_{18}O_{11}$
Molecular Weight:	458.37
Target:	Others
Pathway:	Others
Solubility:	DMSO : ≥ 100 mg/mL



BIOLOGICAL ACTIVITY:

(-)-Gallocatechin gallate is the polyphenol isolated from tea, with cancer-preventive activities. ***In Vitro:*** The amount of (-)-Gallocatechin gallate does not differ in leaves of different stages, and the content is relatively low[1]. (−)-gallocatechin gallate in combination with active catechins ((−)-epigallocatechin gallate) has synergistic effects on the induction of apoptosis and inhibition of cell growth for PC-9 cells. (−)-gallocatechin gallate shows inhibitory effect on α-Glucosidase and DPPH, with IC_{50}s of 30.2 μM and 12.2 μg/mL[2].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: (-)-Gallocatechin gallate is dissolved in DMSO.[2]Cell viability is examined by measuring the capability of cells to metabolize MTT to a purple formazan dye. Human liver cancer HepG2 cells are maintained in DMEM medium supplemented with 10% fetal bovine serum, 100 units/mL penicillin, and 50 units/mL streptomycin at 37°C in a humidified incubator with 5% CO_2 atmosphere. Cells are seeded in 96-well tissue culture plates for 24 h and then incubated with the tested compounds at different concentrations for 72 h. After incubation, 25 μL MTT in 5 mg/mL PBS is added and incubated for 4 h. The medium is aspirated and replaced with 150 μL dimethyl sulfoxide (DMSO) to dissolve the formazan salt. The color intensity of the formazan solution, which reflects the cell growth condition, is measured at 570 nm using a microplate spectrophotometer.

References:

[1]. Zhang LQ, et al. Accumulation of catechins and expression of catechin synthetic genes in Camellia sinensis at different developmental stages. Bot Stud. 2016 Dec;57(1):31.

[2]. Zhou H, et al. C-geranylated flavanones from YingDe black tea and their antioxidant and α-glucosidase inhibition activities. Food Chem. 2017 Nov 15;235:227-233.

CAIndexNames:

Benzoic acid, 3,4,5-trihydroxy-, (2S,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester

SMILES:

O=C(O[C@H]1[C@H](C2=CC(O)=C(O)C(O)=C2)OC3=CC(O)=CC(O)=C3C1)C4=CC(O)=C(O)C(O)=C4

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 610-426-3128 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA