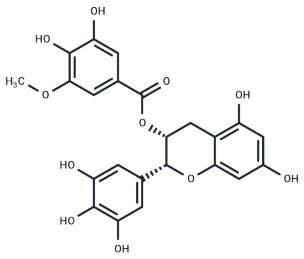
Data Sheet (Cat.No.TN1608)

TargetMol

(-)-Epigallocatechin-3-(3''-O-methyl) gallate

Chemical Properties



CAS No. : 83104-87-4

Formula: C23H20O11

Molecular Weight: 472.4

Storage: Store at low temperature,Keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	(-)-Epigallocatechin-3-(3''-O-methyl) gallate ((-)-EGCG-3''-O-ME) is a natural product isolated from tea leaves with potent antioxidant, cytotoxic, and antibacterial properties, and it improves the adhesive stability of etching rinsing adhesives to dentin.
Targets(IC50)	Antioxidant,Antibacterial
In vitro	(-)-Epigallocatechin-3-(3''-O-methyl) gallate (3''Me-EGCG) (0-12.5 μM; 30 min; 37 °C) demonstrated scavenging effects in both HaCaT cell and cell-free systems. 3''Me-EGCG (6.25、12.5 μM) increased cell viability and heme oxygenase 1 (HO-1) expression under H2O2 exposure and protected keratinocytes while regulating the survival protein AKT1 under ultraviolet B (UVB) and sodium nitroprusside (SNP) exposure.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1169 mL	10.5843 mL	21.1685 mL
5 mM	0.4234 mL	2.1169 mL	4.2337 mL
10 mM	0.2117 mL	1.0584 mL	2.1169 mL
50 mM	0.0423 mL	0.2117 mL	0.4234 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Kawase M, et al. Antioxidative activity of (-)-epigallocatechin-3-(3''-O-methyl)gallate isolated from fresh tea leaf and preliminary results on its biological activity. Biosci Biotechnol Biochem. 2000;64(10):2218-2220.
Kim E, et al. Antioxidant and Cytoprotective Effects of (-)-Epigallocatechin-3-(3″-O-methyl) Gallate. Int J Mol Sci. 2019;20(16):3993.
Deng X, et al. Magnetic ligand fishing combination with high-performance liquid chromatography-diode array detector-mass spectrometry to screen and characterize cyclooxygenase-2 inhibitors from green tea. J Chromatogr B Analyt Technol Biomed Life Sci. 2014;973C:55-60.
Kagaya N, et al. Suppression of cytotoxin-induced cell death in isolated hepatocytes by tea catechins. Eur J Pharmacol. 2002;450(3):231-236.

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