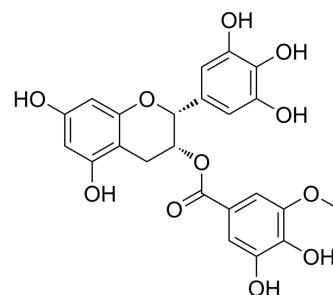


(-)-Epigallocatechin-3-(3''-O-methyl) gallate

Cat. No.:	HY-N2228
CAS No.:	83104-87-4
Molecular Formula:	C ₂₃ H ₂₀ O ₁₁
Molecular Weight:	472.4
Target:	Others
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (105.84 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		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		
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.25 mg/mL (2.65 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.25 mg/mL (2.65 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	(-)-Epigallocatechin-3-(3''-O-methyl) gallate ((-)-EGCG-3''-O-ME) is a natural product that can be isolated from the tea leaf, with strong antioxidative activity. (-)-Epigallocatechin-3-(3''-O-methyl) gallate has a strong cytotoxic activity for rat cancer cells ^[1] .
In Vitro	(-)-Epigallocatechin-3-(3''-O-methyl) gallate scavenges DPPH-derived radicals (IC ₅₀ : 36.54 μM), and scavenges ABTS radicals (IC ₅₀ : 2.59 μM) ^[2] . (-)-Epigallocatechin-3-(3''-O-methyl) gallate (12.5 μM, 30 min) scavenges intracellular ROS production in RAW264.7 cells ^[2] . (-)-Epigallocatechin-3-(3''-O-methyl) gallate (6.25 and 12 μM, 24-72 h) promotes cell proliferation in HaCaT cells ^[2] . (-)-Epigallocatechin-3-(3''-O-methyl) gallate (6.25 and 12 μM, 12 h) increased HO-1 expression in HaCaT cells treated with 250 μM H ₂ O ₂ ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis^[2]

Cell Line:	HaCaT cells treated with 250 μ M H ₂ O ₂
Concentration:	6.25 and 12 μ M
Incubation Time:	24 h
Result:	Increased HO-1 expression, indicating the cytoprotective role against H ₂ O ₂ .

REFERENCES

[1]. Kim E, et al. Antioxidant and Cytoprotective Effects of (-)-Epigallocatechin-3-(3'-O-methyl) Gallate. Int J Mol Sci. 2019 Aug 16;20(16):3993.

[2]. 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 Oct;64(10):2218-20.

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

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